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FORMER NEBRASKA ORDNANCE PLANT

RESTORATION ADVISORY

BOARD MEETING

HELD IN MEAD, NEBRASKA

DATE: JULY 13, 2006

TIME: 7:00 P.M.

Reported by Cynthia A. Craig  
Videographed by John Thomas

1                   GARTH ANDERSON: Hi, good evening  
2 everybody, welcome to the Mead RAB meeting. If  
3 everyone could take their seats we'll go ahead and  
4 get started.

5                   First of all, I'd like to point out we do  
6 have refreshments over here, we do have coffee, some  
7 cookies and some bottled water left over from our  
8 site tour in the red cooler, so please help  
9 yourself.

10                  NEW SPEAKER: What's left over, the --

11                  GARTH ANDERSON: The bottled water is left  
12 over from the site tour, not the cookies. I think  
13 the crew at the treatment plant took care of the  
14 cookies.

15                  Also in the back of the room there are a  
16 number of handouts that are -- that are there for  
17 reference for you to take home, and we'll refer to  
18 some of them during the presentation.

19                  Also if you have not signed in, we would  
20 appreciate it if you could.

21                  First of all, I'm Garth Anderson, I'm the  
22 army co-chair for the Mead RAB. Now, again apologize  
23 for the weather, it looks like we know how to pick  
24 the right date. Seems like last April we were under  
25 tornado watches and warnings, and I don't know if

1     tonight is going to be any better. We survived one  
2     monsoon earlier this afternoon, but all lived to  
3     tell about it.

4             A few introductions before we get started,  
5     again I'm Garth Anderson, the army co-chair; the  
6     community co-chair, Melissa Konecky in the back, you  
7     can wave your hands, I think everyone knows who you  
8     are, and I'll introduce some of the restoration  
9     advisory board members.

10            These are our active members, Melissa,  
11     John Wageman and Paul Randazzo; and some of our  
12     agency RAB members, Scott Marquess from EPA,  
13     Larry Angle is here from Lower Platte North, and do  
14     we have any other agency members? I don't think so.

15            A few of the army folks that are here just  
16     so you know, we've got Cathi Sanders, who's our  
17     environmental counsel; Jason Leibbert you've all  
18     seen many times at the RAB; Alyse Stoy, EPA counsel;  
19     and from our public affairs office Mr. Tom O'Hara.

20            Okay. Some of the meeting guidelines,  
21     again we've seen all these before, the important  
22     thing is to just one question at a time. Let's let  
23     whoever has a question and answer talk and finish  
24     whatever they have to say, and let's keep it nice,  
25     keep it relaxed, so, you know, I'm not saying we'll

1 have a fun time, but we can certainly have a  
2 pleasant time.

3           Important to know, the meetings are be  
4 recorded, we all are getting familiar with our great  
5 court reporters, they're doing a fantastic job of  
6 getting the transcripts out and getting the  
7 videotape, but it's important that -- and I'm one of  
8 the biggest violators, to speak slowly. I tend to  
9 rush a little bit, but if you do have a question or  
10 if you make a statement, please say your name so  
11 that the court reporter can get your name accurately  
12 and she'll be able to keep up with the transcript.

13           We do have a mailing list. If you'd like  
14 to get -- if you're not getting the hard copy of the  
15 letters coming out, please let me know and we'll  
16 make sure you're on the hard copy mailing list.

17           We also have a project web site that we  
18 try to keep as current as possible, and if you would  
19 like notification that new information has appeared  
20 on the web site, please provide us with your e-mail  
21 address, and we've -- I've got a big e-mail list  
22 that I can blast out to let you know when things are  
23 out there.

24           Slide.

25           Okay. Our agenda --

1                   Yes, sir?

2                   VIDEOGRAPHER: You have to use the  
3 microphone to talk so the court reporter can hear.

4                   GARTH ANDERSON: Good point. Yeah,  
5 please, we have a number of microphones, we have  
6 this one that's tethered to the front and we have  
7 cordless ones that we'll be running around, so if  
8 you have a question please raise your hand, and  
9 Tom O'Hara will bring you a microphone, or one of us  
10 will bring you one of the other cordless  
11 microphones.

12                  So I just want to make sure we get a good  
13 accurate recording of the meeting, so a microphone  
14 is important.

15                  Okay. What are we going to talk about  
16 tonight? Standard stuff, we're going to just give  
17 you an update of what we've done in the last three  
18 months since we had our last meeting in April, we're  
19 going to talk about the site management plan, we're  
20 going to run through what it contains.

21                  In fact, there is a copy of the narrative  
22 for the site management plan in the back. It's on  
23 the big 11-by-17 sheets, so it'd be a good reference  
24 to have when we get to that point of the meeting.

25                  And we'll -- we will talk about the ground

1 water sampling that we've done since -- well, that  
2 we completed in March, to include both the standard  
3 ground water sampling and the direct push sampling  
4 that we've just completed.

5 And then, of course, we want to set a  
6 meeting -- a meeting date for the next RAB, and any  
7 topics that you may have in mind.

8 And here it comes, right on queue.

9 So I guess when we pick a meeting for the  
10 next RAB you guys might as well just rehearse your  
11 evacuation procedures for that night, and make sure  
12 everything's battened down before you come to the  
13 meeting.

14 Okay. What have we done since the last  
15 time we met? Well, first -- first thing that we did  
16 and -- on June 21st we had a site tour, and we had a  
17 great time.

18 We had a bus that took us around to visit  
19 the new treatment plant, the main treatment plant,  
20 and we stopped at a couple other points of interest.

21 Jason, could you -- just want to show you  
22 a couple of great pictures that Larry Angle took on  
23 the tour.

24 This is out at the main treatment plant.  
25 Vince, you look a little mad in that picture, I'm

1 not sure what I said to you, but our guys, our ECC  
2 folks did a fantastic job in taking folks through  
3 the plant.

4 And just another shot of inside the main  
5 treatment plant. We had about 13 people come to the  
6 tour, we managed to get done about two hours, a lot  
7 of information, a lot of standing on the ground and  
8 seeing things up close.

9 Gives you a little better context than we  
10 can give you on the slides, and we do plan to make  
11 this an annual event because I think it really is a  
12 meaningful thing.

13 It doesn't replace the RABs, it just  
14 supplements what we're doing here in our quarterly  
15 RABs.

16 What else have we done? Site management  
17 plan, we did -- we did submit the updated version of  
18 the site management to EPA and DEQ, and it's  
19 currently under review.

20 March sampling results have been  
21 published, the fall and spring direct push  
22 investigation results have been published. And  
23 those last two documents, by the way, are on the web  
24 site so you can go out there and take a look and  
25 download it.

1                   We do have a new design for our  
2   EW-11 extraction well 11 treatment system that we'll be  
3   putting in next year. We've also made some  
4   improvements to our document library, administrative  
5   record, information repository, and I'll talk about  
6   that in a little bit.

7                   And then upcoming work in the next three  
8   to six months, we'll talk about the new monitoring  
9   wells we installed and some future performance  
10   evaluations.

11                  Okay. Let's start with the site  
12   management plan.

13                  Again, I do have a copy of the site  
14   management plan in the back. It's on the big  
15   11-by-17 sheets, so if you want to use that as a  
16   reference, feel free.

17                  And you notice there are a number of  
18   elements of the site management plan numbered one  
19   through eight. Obviously the biggest one that we  
20   have in there is the ongoing operations and  
21   maintenance of the existing treatment plants.

22                  We have -- we plan some investigations of  
23   the plume interior that'll lead to some focused  
24   extraction; the annual ground water monitoring  
25   program, something we have to do every year;



1 performance evaluations, we'll talk about that in a  
2 little bit.

3           Things we're going to do along the eastern  
4 plume, some additional investigations, of course  
5 community relations, what we're doing right here has  
6 to be accounted for in our plan, and then we have to  
7 plan and account just for the overall project  
8 management.

9           Now, the site plant plan is not just a --  
10 something dreamed up by the Corps alone. We've been  
11 working on this for quite some time with EPA and  
12 NDEQ and we've finally come up with something that  
13 we all -- all agree to and are moving out with.

14           One thing I do want to point out, that  
15 this is a living plan. This is not something that  
16 was carved in stone. You know, as a famous general  
17 said, no plan survives the first shot at the enemy,  
18 and a lot of unknowns out there, so we do -- we do  
19 have provisions to adjust the plan for whatever  
20 reason, whether it's budgetary, whether it's -- we  
21 find some information, what have you, we make  
22 adjustments to the plan as necessary.

23           Let's see, for 2006, a planned activity,  
24 we've already completed the sampling along the  
25 eastern boundary, that's to establish the line along

1 the -- along the east. At the end of 2006, we're  
2 planning to install and sample the new monitoring  
3 wells along that eastern edge in both the  
4 existing -- supplement the existing network of  
5 monitoring wells.

6 Of course, this year we did finish the  
7 Load Line 1 treatment system.

8 TOM O'HARA: Question back here.

9 GARTH ANDERSON: Yeah, Tom.

10 LYNN MOORER: Thank you so much for your  
11 help. This is Lynn Moorer.

12 I noted with interest, since we're talking  
13 about site management plan, I do appreciate the  
14 larger print. You explicitly promised at the last  
15 meeting that you would provide the site management  
16 plan with print large enough to read without a  
17 magnifying glass.

18 But the trouble is you didn't include at  
19 all one of the main and most important things is the  
20 time line, the schedule, and that's got the tiniest  
21 print, and this is the latest one that I have found  
22 at DEQ, which is dated May 17th, 2006, which is  
23 after that last RAB meeting we had on April 6th.

24 So you still haven't provided the most  
25 important or the most critical document to go along

1 with what you're talking about right now; that is  
2 the time line, and that's not provided, and this is  
3 the tiniest print I've ever seen.

4 Incidentally Ms. Konecky wanted me to  
5 mention that there is -- we have discovered one  
6 thing in this community that is cast in stone about  
7 this particular project, and that apparently are  
8 those chemicals or contaminants of concern; you're  
9 certainly unwilling to change those.

10 In any rate, I am looking forward to the  
11 time line, do you have that in print --

12 GARTH ANDERSON: One thing that --

13 LYNN MOORER: Could you wait until I'm  
14 done before you interrupt, please.

15 Do you have a version of the time line in  
16 the print as large as the narrative of the site  
17 management plan?

18 GARTH ANDERSON: Okay. You're done with  
19 your question, I think there's a question in there.  
20 The -- if you notice --

21 LYNN MOORER: You don't need to insult me  
22 Mr. Anderson. You know there was a question in  
23 there. There's no -- there's no need for you to  
24 make that kind of spurious insulting remark.

25 GARTH ANDERSON: My apologies.

1           You will notice that in the narrative that  
2 we did pass out that it does correlate with the  
3 actual schedule. The -- the dates in there are  
4 based on that schedule, on that detailed schedule.

5           LYNN MOORER: What you don't -- excuse me.

6           What you don't have are the duration, the  
7 start and the finish and the breakdown under each of  
8 these projects.

9           There's at least, oh, I'd say ten pages if  
10 not twelve pages of much more detail that I know  
11 answer a lot of the questions that a lot of the  
12 people have been asking.

13          GARTH ANDERSON: Well, we can print that  
14 out in much bigger fashion.

15          LYNN MOORER: That's part of the site  
16 management plan that you promised that you would  
17 print in -- large enough so you don't have to use a  
18 magnifying glass, and you said you would have it at  
19 this meeting.

20          GARTH ANDERSON: We provided the  
21 narrative, which does have dates and budgetary  
22 numbers. It's a very good summary of the entire  
23 site management plan.

24          LYNN MOORER: It's not readable.

25          GARTH ANDERSON: Okay. More planned

1 activities for 2006, we're going to complete the  
2 design of EW-11 Advanced Oxidation Process Treatment  
3 System, again that's when we're using the actual  
4 pipeline to act as a treatment vessel to go to the  
5 treatment plant.

6 The updated groundwater model will be  
7 submitted in September, and we're going to start  
8 planning for the five-year review, start some of the  
9 preparation for the five-year review, which is due  
10 in 2007, and continue with our sampling of both the  
11 one-mile and half-mile buffer zones.

12 Okay. 2007, continue sampling, complete  
13 the five-year review, and the highlight here I think  
14 is the annual remedy performance report, that's  
15 where we pull all the data together, the model, the  
16 sampling data, hydraulic data, and do an assessment  
17 of the overall containment system.

18 We'll finish -- there will be a little  
19 more on the containment evaluation to come.

20 The -- we'll finish construction of the  
21 EW-11 AOP, and once -- now that we have a better  
22 handle on the edge of the plume we're going to start  
23 next year focusing on the interior of the plume.

24 LYNN MOORER: Why don't you tell us what  
25 AOP means.

1           GARTH ANDERSON: I'm sorry, AOP is  
2   advanced oxidation process. It's a chemical process  
3   where we have oxidizers that are introduced into the  
4   pipeline with the contamination, and the time that  
5   it takes the contamination to travel from the  
6   extraction well to the treatment building, a  
7   chemical reaction occurs so that the contamination  
8   is knocked down and destroyed.

9           Slide, please.

10           In 2008, continue the updated model,  
11   install some ground water circulation wells in  
12   certain hot spots, and continue investigations  
13   monitoring the plume, and continue the monitoring of  
14   the buffer zone.

15           And same with 2009, and in 2009 I would  
16   point out that we say possible plume interior investigation;  
17   right now we do plan to do investigations of the  
18   interior plume to look for some of these hot spots  
19   and maybe attack them to decrease our restoration  
20   time of the plume.

21           These are our planned budget numbers for  
22   the SMP. Again, we're -- these are the budget numbers  
23   that we're requesting, the realities of the  
24   budgetary process is we may not get all of what  
25   we're requesting, and we may have to adjust the plan

1 accordingly, but we will always continue to request  
2 funds and obtain them to the best of our abilities.

3 But one thing we have to keep in mind is  
4 there are some costs that we have to take right off  
5 the top that -- these have to happen before anything  
6 else can happen, and that's continued operation of  
7 the treatment plant, the monitoring, and then some  
8 investigation work, but, again, once -- we have to  
9 take care of the monitoring and the operation of the  
10 system before we go do anything else.

11 Okay. At this time I'm going to turn over  
12 the microphone to Jason Leibbert, who's going to  
13 walk us through the sampling that we've just  
14 completed, and just touch a little bit about the  
15 June event, and then he'll talk about some other  
16 topics such as the containment evaluation and other  
17 things.

18 JASON LEIBBERT: Thank you.

19 The June GMP sampling event was completed  
20 in June obviously, June 20th, 21 monitoring wells  
21 sampled, 4 residential wells sampled, 11 surface  
22 water locations sampled during this round.

23 If you recall every quarter the sampling  
24 schedule is little bit different. Some monitoring  
25 wells get sampled four times a year, some monitoring

1 wells only get sampled once a year, so depending on  
2 how that schedule shakes out each quarter is a  
3 little bit different.

4 The September GMP event is usually the  
5 largest one, and it'll include more monitoring  
6 wells, more residential wells, than what was done in  
7 June.

8 Slide.

9 A quick summary of the March GMP results.

10 LYNN MOORER: Excuse me, Lynn Moorner.

11 Mr. Leibbert, are you going to tell us  
12 more about your findings in June; that is, this June  
13 sampling event findings before --

14 JASON LEIBBERT: I think --

15 LYNN MOORER: Give us the high points.

16 JASON LEIBBERT: I didn't read the slide  
17 verbatim, but if you look at the slide it said the  
18 data results are anticipated to be finalized in  
19 October of this year.

20 So we sample -- collect samples in June,  
21 we send them to the lab, they do their analytical  
22 work, we receive the results, we evaluate those  
23 results, we publish a report, and that usually takes  
24 about 90 days, and if you remember, that's kind of  
25 what we talked about in the past.



1                   LYNN MOORER: I'm just wondering, are you  
2   able to tell us anything substantive other than  
3   just we tested this many? I'm asking were there any  
4   significant findings, that's what we always would  
5   like to hear from you each RAB meeting.

6                   Thank you.

7                   JASON LEIBBERT: The sampling that was  
8   collected on June 20th, no, we do not have the  
9   results yet.

10                  LYNN MOORER: Not at all?

11                  JASON LEIBBERT: They're still in the  
12   laboratory. It typically takes 30 days at the lab  
13   before we receive the results.

14                  LYNN MOORER: You don't have any idea?

15                  JASON LEIBBERT: I just told you we don't  
16   have the results from the lab, so I can't explain  
17   something that I don't have, but we can talk about  
18   the results from the March GMP sampling event, and,  
19   again, as Garth mentioned, that report has been  
20   posted on the web site so it's available for you  
21   guys to look at.

22                  And one of the areas of concern based on  
23   questions from these meetings has been the surface  
24   water results, so we have a few charts that we can  
25   discuss the results in detail this time tonight.

1           GARTH ANDERSON: Can you point out that  
2 the people with the small slides have the big slides  
3 on the back.

4           JASON LEIBBERT: If you got a set of  
5 slides with the smaller print, if you turn to the  
6 back there should be some full-sized pages of these  
7 charts.

8           So this first one is TCE at surface water  
9 location SW-08, and if you recall SW-08 is  
10 located -- this one right here on Johnson Creek, and  
11 this one has been pretty consistent. There's TCE  
12 detections in the range of 30 to 50 parts per  
13 billion, and it's been that, well, for the past six  
14 quarters in a row here on this chart.

15           Next one.

16           Next one is TCE detections at surface  
17 water location 10, which is a little bit down  
18 gradient of Surface Water 8, so it's a little bit  
19 downstream, and, again, this one always has a few  
20 detections that have been relatively stable over  
21 time.

22           This one, TCE detections in SW-11. This  
23 one is one Clear Creek, and this one had an unusual  
24 result back in -- back in 2004. You can see that's  
25 that first one on the chart. It had a detection of

1 12 parts per billion TCE, but subsequently has been  
2 nondetect each event.

3 So it's kind of an unusual result, but  
4 we've been looking for it again to see if it  
5 reappears, and it hasn't yet, but we'll continue to  
6 sample that again in the future to see if that -- if  
7 we can find that again.

8 Next one.

9 So now here's a few slides about RDX, and  
10 this one is RDX detections at SW-6, which is a  
11 little up gradient from SW-8, and as you can see,  
12 the concentrations have been relatively stable;  
13 they've all been less than 2 parts per billion so  
14 far.

15 TOM O'HARA: Jason, question.

16 NEW SPEAKER: I was wondering --

17 COURT REPORTER: I'm sorry, ma'am, what is  
18 your name?

19 WANDA BLASNITZ: Sorry, Wanda Blasnitz.

20 COURT REPORTER: Thank you.

21 WANDA BLASNITZ: On the detections for  
22 surface water for TCE, what's the standard or are  
23 there surface water -- you know, like there are for  
24 the drinking water?

25 JASON LEIBBERT: That's a good question.

1           This has been a question at the site for a  
2 while now, what's the appropriate standard. The  
3 state of Nebraska does have a surface water quality  
4 standard for TCE in surface water in the state of  
5 Nebraska, and that standard is set at 810 parts per  
6 billion.

7           So the difference between that sort of  
8 standard versus the cleanup standard that we have at  
9 our site, our standard is a drinking water standard,  
10 and that is set at five parts per billion of TCE.

11           So what the state of Nebraska has  
12 determined is that surface waters, something like  
13 Johnson Creek, that's not a drinking water supply,  
14 you know, it's acceptable to have slightly higher  
15 concentrations as opposed to the drinking water  
16 standard, excuse me.

17           So the state is saying basically you  
18 shouldn't be drinking this water, but 30 parts per  
19 billion, 50 parts per billion doesn't pose an  
20 unacceptable risk.

21           SCOTT MARQUESS: The risk base.

22           JASON LEIBBERT: It is a risk base.

23           SCOTT MARQUESS: Do you want to go into --

24           JASON LEIBBERT: In addition to the  
25 surface water quality standard, we're doing our own

1 evaluation with -- with EPA, and the state DEQ,  
2 Nebraska Department of Environmental Quality, is  
3 also doing kind of a similar determination to see if  
4 a different standard should be applied at this site  
5 or not, and that's in progress right now. We've  
6 been working on it.

7 So one more slide.

8 TOM O'HARA: Got a question.

9 WANDA BLASNITZ: I wondered why are they  
10 thinking there's a different standard that needs to  
11 be required?

12 JASON LEIBBERT: The state standard that  
13 Nebraska defined is based on aquatic life, so it's  
14 looking at organisms and things that actually live  
15 in the surface water.

16 What we're doing with EPA is we're looking  
17 at different exposures. Johnson Creek, you know,  
18 you guys that live here know that Johnson Creek  
19 sometimes doesn't carry a lot of water, but the  
20 point is that when we look at these kinds of sites,  
21 we look at what would happen if someone were  
22 swimming in Johnson Creek and what would their  
23 exposure be and would this level of contamination  
24 result in any sort of unacceptable risk to that  
25 person, or if this person was fishing in

1 Johnson Creek, what would the risk to that person  
2 be.

3 So that's the evaluation that we're  
4 working on with EPA, that the state surface water  
5 quality standard doesn't exactly take all that into  
6 account.

7 Their standard is based on organisms and  
8 things that would live in the surface water, and  
9 that's how they come up with their number.

10 Is this the last one?

11 GARTH ANDERSON: I think so.

12 JASON LEIBBERT: I think this is the last  
13 one. This is RDX detections in Surface Water 10,  
14 and again you can see they're pretty consistent over  
15 time, they don't change very much.

16 So just a little bit more about the GMP  
17 progress. We've submitted several documents since  
18 the last RAB, we've submitted all the results from  
19 March. Again, that's what's on the web site. We  
20 submitted some updated project plans for EPA review,  
21 and we also submitted the annual report for  
22 2005, which as you remember is the summary report.

23 All the data that was collected in  
24 2005 goes into one single report, and then that was  
25 completed back in May.

1           This is -- wow, it's really raining.

2           This is -- I want to talk about the  
3 results of sampling that we did in the fall of last  
4 year and then in the spring of this year.

5           In 2005, around November or December time  
6 frame, we collected samples from 118 different  
7 locations across the site, and then we looked at  
8 those results, and based on that went back in the  
9 springtime and collected samples at another  
10 102 locations in addition to all that.

11           At each one of those sample locations we  
12 went to three different depths and collected ground  
13 water samples from three different depths below the  
14 ground surface.

15           Just, for example, we went down to 10 feet  
16 below grade, down to 50 feet below grade, and down  
17 to 80 feet below grade, and collected water samples.

18           There's over 700 analytical results, and  
19 we're going to move the screen so we can talk a  
20 little bit about those results.

21           And these maps, they don't show well on  
22 the screen, on the computer screen. They don't fit  
23 into PowerPoint very well, so we put them up on the  
24 wall. I know they're hard to read from the back of  
25 the room obviously, but when we're done tonight, if

1 you want to look at those, come up and we'll talk  
2 about it and I'll answer questions about those  
3 specifically.

4 GARTH ANDERSON: In fact, while Jason is  
5 explaining it, if anyone would like to come up and  
6 just try to get a better view while he orients  
7 everyone to the map it would be helpful.

8 JASON LEIBBERT: Yeah, that'd be fine too.

9 This first figure is the -- this is the  
10 old plume boundary that was defined in 1997, in the  
11 ROD, in the record of decision, so this is kind of  
12 the starting point. This is what we started with in  
13 1997.

14 This is all the sample locations that we  
15 did at the fall of 2005 and then in the spring of  
16 this year as I explained, so every one of these  
17 little dots is where we set up the direct push  
18 truck, went to three different depth intervals and  
19 collected ground water samples from these three  
20 different depths, so they're kind of oriented in  
21 lines that we call transects, so if I refer to  
22 something as a transect, that's what I'm talking  
23 about.

24 And the objective was to pretty much cover  
25 the whole site from north to south right along this



1 boundary, so all those -- all those transects fall  
2 right down here, right on this line, and our  
3 objective was to kind of find out, prove to  
4 ourselves and prove to everyone else if this line is  
5 still accurate, and is this still a good way to  
6 depict the extent of the plume in the eastern  
7 direction.

8           There's more work to be done in here, and  
9 we'll get to that eventually, that's what the site  
10 management plan talks about, but our objective right  
11 now is to find where this line is for real.

12           This one -- I know it probably looks bad  
13 from the back of the room, but this one has -- each  
14 one of these points there's the analytical results  
15 from each one of those locations, so if you want to  
16 come up afterwards and look at these we can look at  
17 some specific analytical results from each one of  
18 these points.

19           Again, this report is on the web site, all  
20 these maps are in that report so you can refer to  
21 that if you'd like.

22           The bottom line is if you take the results  
23 from all these sample locations and draw a new map  
24 of where the plume is, this is what you come up  
25 with.

1           As you can see, the TCE boundary is  
2 actually quite consistent. The biggest change is in  
3 here, and then there's a little difference here, but  
4 this whole boundary all the way up is actually very  
5 consistent with the way it was drawn in 1997.

6           So the conclusion is that what was done in  
7 the past was actually pretty good work, and we've  
8 confirmed it.

9           The other major conclusion from this is  
10 that the extent of the RDX contamination may be  
11 quite different than what we've determined in 1997.

12           This green outline is the extent of the  
13 RDX plume, and as you can see it, it's quite  
14 different, so the conclusion we draw from that is  
15 that we probably need to re-look at how we draw or  
16 how we depict on the figures that -- the extent of  
17 the RDX contamination.

18           And we'll probably have to do some  
19 confirmation work next year to try to confirm if  
20 these results are accurate, and we'll do more. As  
21 you can see, we actually didn't do much of direct  
22 push sampling in this area, so we'll go back and do  
23 this area, which is -- which is around here.

24           Too close to the speaker.

25           TOM O'HARA: Jason, we have a question.

1                   LORUS LUETKENHAUS: How about below action  
2 level detection for TCE on the eastern edge. Has it  
3 changed since 1997?

4                   JASON LEIBBERT: No, it hasn't, that's  
5 what this outline is. This is the below action  
6 level, so this is the less than five parts per  
7 billion for TCE, and then the blue one is the less  
8 than two parts per billion for RDX in ground water.

9                   LORUS LUETKENHAUS: You've told us before  
10 that those lines were at action levels and now  
11 you're saying they're below action.

12                  JASON LEIBBERT: This line -- what we're  
13 saying and we've always said is that what we  
14 think -- we think that ground water inside this line  
15 is above action level, and that's what these results  
16 tell us, and if you're outside this line you're  
17 below action level.

18                  LORUS LUETKENHAUS: That's what I'm  
19 saying, has -- when you're outside of the line, has  
20 that changed since 1997?

21                  JASON LEIBBERT: No, it hasn't.

22                  LORUS LUETKENHAUS: Do you have a map that  
23 shows that?

24                  JASON LEIBBERT: This is probably the most  
25 confusing figure of all, this is this old outline on

1 top of this new outline and it -- to try to show  
2 where the differences are.

3 LORUS LUETKENHAUS: Uh-huh.

4 JASON LEIBBERT: The difference on this  
5 side is very small. There is some difference in  
6 here, and I know it's hard to see, but this is the  
7 old line and this is the new line.

8 So to answer the question, has the extent  
9 of contamination the way we -- the way we understand  
10 it, has that changed, and the answer is no. For  
11 this TCE plume on the eastern perimeter it hasn't  
12 changed significantly.

13 What's going on in here, yes, that's quite  
14 different, but that's less critical. That's all  
15 university property, you know, there's no residents  
16 living there.

17 DAVE MCREYNOLDS: How about RDX and --  
18 even at a low level, how far east is it compared to  
19 your old 1997.

20 JASON LEIBBERT: This is the way we showed  
21 it in '97, this green outline, which you can see  
22 covers quite a large area, and that's what we had  
23 determined to be contaminated with RDX above the  
24 action level of two parts per billion.

25 Now, based on -- just based on these

1 results and these results alone, it looks something  
2 like this. It's much smaller in area. And then  
3 there's this big gap where there doesn't seem to be  
4 any RDX contamination based on these results, and  
5 there's a little bit here and then there may be some  
6 more over here, so it's quite different than what  
7 was determined in '97.

8 DAVE MCREYNOLDS: Dave McReynolds again.

9 You still haven't answered my question for  
10 low level; is it farther east than it used to be?  
11 You've talked about contamination, but you don't --  
12 you don't say how far it is at a low level, is it  
13 farther east?

14 JASON LEIBBERT: Well, this outline is  
15 based on the action level of two parts per billion,  
16 so, again, what we think, based on these results, is  
17 that if you're inside the shape there's  
18 contamination above two parts per billion RDX, and  
19 if you're outside that shape there's contamination  
20 less than two per billion, which is below the safe  
21 drinking water level, which is below our cleanup  
22 levels for this site.

23 DAVE MCREYNOLDS: Yeah, I understand that  
24 and I -- but you won't -- you won't draw the line  
25 out there how far it is and if it's gone any farther

1 east even at the low level.

2 JASON LEIBBERT: Well, a lot of these are  
3 nondetect, that's why they don't show up here. RDX  
4 was not detected at many of these locations. These  
5 are the only locations where RDX was detected above  
6 the action level of two parts per billion.

7 GARTH ANDERSON: This is Garth Anderson.

8 If you'd like to come up afterwards, the  
9 map on your far right will show how far out that we  
10 have a nondetect for each of the contaminants.

11 So you can see if we go out, we go out, we  
12 have a number, we have a number, and then we hit a  
13 point where it's nondetect, so we know that the line  
14 is probably somewhere in between the last hit, if  
15 you will, and then the nondetect.

16 So that -- but in 1997 we didn't have that  
17 level of detail to be able to make that  
18 determination, so now we know much more -- a lot  
19 greater detail about where that edge is.

20 So anyone who does want to come up  
21 afterwards, I think it would be helpful for us to  
22 explain.

23 LYNN MOORER: I think the issue that  
24 perhaps both of you are missing, Mr. Leibbert and  
25 Mr. Anderson, is that we're asking for a map that

1 shows a progression, showing how this -- your latest  
2 findings have changed as compared to the last sample  
3 as compared to the sample before that or perhaps on  
4 a semiannual basis.

5 Mr. Luetkenhaus specifically asked you for  
6 that type of delineation at each meeting. At the  
7 last RAB he asked for that, so we keep asking this.  
8 We want to see a comparative difference each time to  
9 have an idea, and it's not just at the action  
10 levels, it's anything, any detects of the  
11 contaminants.

12 GARTH ANDERSON: Well, if you look at --  
13 this is Garth Anderson.

14 If you look at the map on the lower right,  
15 it does show the comparative analysis between what  
16 originally was drawn in 1997 and the results that we  
17 have from our direct push investigation. That's --  
18 it's a very a good depiction, and I think it'll  
19 answer a lot of questions.

20 LYNN MOORER: Direct push in February,  
21 March?

22 GARTH ANDERSON: Yes.

23 LYNN MOORER: This year?

24 GARTH ANDERSON: Yes.

25 LYNN MOORER: All right. The point --

1 that is one map that is of some use, but we're  
2 talking about the difference also from sampling  
3 event to sampling event or perhaps from 2005 to  
4 2006.

5 We're not looking from just as far back as  
6 1997, although that is one of the components, but  
7 we're also looking in a progression in the  
8 difference between how far it appears to extend from  
9 when you sampled in March 2005, for example, to  
10 March 2006.

11 JASON LEIBBERT: I do understand the  
12 question, and my response is everything you asked  
13 for is in that report, and it's on this figure, it's  
14 on this figure, it's on some of these other figures.

15 LYNN MOORER: Everything?

16 JASON LEIBBERT: Now, what you asked for,  
17 which is something that we don't do, because the  
18 results don't change from quarter to quarter, you're  
19 asking everything three months, every quarter when  
20 we go out GMP sampling do you update the maps.

21 And the answer is, yes, those maps have  
22 been updated based on those quarterly results, and  
23 we've been presenting those maps at each RAB for a  
24 while now, but I think you have to understand that  
25 the results from the monitoring wells three months



1   apart actually don't change very much so the maps  
2   look very similar from quarter to quarter to  
3   quarter.

4                   And those maps are printed in the  
5   quarterly data reports which we've been putting in  
6   the library, now we're putting them on the web site,  
7   so we have been providing or publishing those kinds  
8   of maps that you just asked for.

9                   LYNN MOORER:  Actually you haven't been  
10   providing them to the public in a timely fashion by  
11   any stretch of the imagination.

12                   But to clarify, I wasn't necessarily  
13   saying you need to provide a new map every three  
14   months to show the difference.  I'm saying whatever  
15   makes sense; if you're testing the same wells  
16   essentially in March 2005 as did you in March 2006,  
17   then we'd like to see that comparison.

18                   By the way, what report is it you're  
19   saying those maps are from?

20                   JASON LEIBBERT:  These maps up here are in  
21   the fall 2005/spring 2006 ground water investigation  
22   data summary report, that was published in June of  
23   this year.  I can't remember the exact date,  
24   June 30th maybe.  It's on the web site, if it's not  
25   in the library on the computer it will be soon.

1           BRADDEN BIGELOW:  It is.

2           JASON LEIBBERT:  It is on the computer.

3           LYNN MOORER:  I assure you it's not in the  
4 library.

5           BRADDEN BIGELOW:  It's there.

6           JASON LEIBBERT:  It's on the computer that  
7 we put in the library, which we're going to talk  
8 about in a few minutes actually.

9           LYNN MOORER:  Oh, it arrived today, how  
10 very clever.  That's a lot -- that's a lot of notice  
11 before the meeting, ability to study the  
12 information.

13           JASON LEIBBERT:  Well, it was published at  
14 the end of June so it's actually only about ten days  
15 old, and it's been on the web site for a couple of  
16 days.

17           WANDA BLASNITZ:  I guess not being at all  
18 familiar with everything over the years, when you  
19 did that comparison from '97 to now, basically is  
20 that something where you took more samples than you  
21 normally do to get that kind of data, and is that  
22 something then that you do every so many years, or  
23 how does that work?

24           JASON LEIBBERT:  It doesn't happen on any  
25 sort of fixed schedule like every five years we go

1 out and do this kind of thing again.

2 The short answer is that, yes, the work  
3 that was done in '97 was spread out over the entire  
4 site.

5 I didn't mention it, but these figures  
6 don't actually include Load Line 1, which is over  
7 here on the west side. This is Load Line 4, 3, 2,  
8 and then 1, because we didn't do any work over there  
9 as part of this effort.

10 So this effort was highly concentrated on  
11 this part of the site, and the objective was really  
12 to get that -- this -- to determine if this is an  
13 accurate depiction of the extent of TCE  
14 contamination on the eastern side.

15 And, again, there's more work that needs  
16 to be done to cover the rest of the site to see  
17 if -- you know, like this is a pretty significant  
18 change in the extent of the RDX contamination  
19 compared to this, and we need to go determine if we  
20 see similar changes over here on the western side of  
21 the site.

22 It's in the site management plan, it's --  
23 I can't remember exactly when it's scheduled to  
24 start, but that's something that is on our plate to  
25 do over the next couple of years, is to keep doing

1    this kind of investigation all the way across the  
2    whole site.

3               HAROLD KOLB:   And I noticed on one of our  
4    pieces of ground that is directly -- where the push  
5    sample was taken directly east of EW-1, is that --  
6    that is 2905, is that contamination going to be  
7    drawn into EW-1 or is it just going to kind of  
8    filter on down south?

9               JASON LEIBBERT:   Sample result at  
10   Location 2905, yes, it's in -- within the hydraulic  
11   influence of EW-1, and EW-1 will be able to capture  
12   that in the future.

13              HAROLD KOLB:   Even though it's straight  
14   east, it's going to backtrack?

15              JASON LEIBBERT:   I'm fairly confident in  
16   saying that, yes, that shouldn't be a problem.   That  
17   kind of talks about the subject of containment  
18   evaluation and is the extraction well system  
19   capturing everything it's supposed to, which is the  
20   subject of more slides later on in the presentation,  
21   so we'll get to that.

22              HAROLD KOLB:   Okay.   Then on 3004, which  
23   is south of that one aways, there's a hit of a level  
24   of two on that one; is that -- and that's not going  
25   to backtrack a quarter of a mile I'm sure.   I know

1 two is only a two, but are you just going to let it  
2 go or is it just going to keep building?

3 It's 3004 at 20 feet.

4 JASON LEIBBERT: Harold, I think the  
5 result you're talking about is two parts per billion  
6 of TCE, which is below that safe drinking water, the  
7 five parts per billion TCE, which is what our  
8 cleanup at this site is based on.

9 So concentrations that are less than the  
10 safe drinking water level are -- do not pose an  
11 unacceptable risk to anyone, and that -- you're right,  
12 it's probably outside the hydraulic capture zone of  
13 EW-1, and it's not subject to cleanup.

14 HAROLD KOLB: When will you test at that  
15 same location again to see if that two is changing  
16 to a three or staying at a two or what?

17 JASON LEIBBERT: That is a very good  
18 question because where do we go from here? Where do  
19 we go from here is we'll be installing a number of  
20 new monitoring wells along this eastern boundary so  
21 we'll be able to do that kind of analysis in the future  
22 to see if these results change significantly over  
23 time.

24 And, again, that's part of more slides  
25 later in the presentation; I think we'll get to

1     that.

2                 There's also a monitoring well, MW-62,  
3     which is very close to that exact same location that  
4     you're talking about, Harold, and that monitoring  
5     well is routinely nondetect.

6                 Any more questions on these figures, we'll  
7     go back to the presentation slides?

8                 GARTH ANDERSON:   This will take a second  
9     to warm back up.

10                JASON LEIBBERT:   Okay.   Next slide.

11                This slide is just what we talked about,  
12     these five figures on the wall showing these results  
13     in a couple of different ways.

14                Again, the conclusions, like we talked  
15     about, the first conclusion is that the extent of  
16     TCE contamination on the eastern perimeter of the  
17     site really hasn't changed much since the way it was  
18     determined in 1997, so that's good news.

19                The RDX or the extent of RDX contamination  
20     on that eastern half of the site looks like it is  
21     significantly different than what it was determined  
22     to be in 1997, which is important for us when we  
23     talk about containment and is the extraction well  
24     system capable of capturing all the contaminated  
25     ground water, but it does not pose a threat to -- or

1 it doesn't pose as concerning a threat to residents  
2 on the eastern side of the site, you know, beyond  
3 the extent of contamination.

4           So that tells us that we have more work to  
5 do on the interior of the site, but the perimeter  
6 where there's a chance for local residents to be  
7 exposed, you know, there should be no issue with RDX  
8 contamination there.

9           And then again, our conclusion, where do  
10 we go from here, what do we do with these results,  
11 these results will be used to locate a number of new  
12 monitoring wells to go along the eastern side, which  
13 again if you've been to these meetings before,  
14 you've heard us say this before, that the plan all  
15 along has been to put more monitoring wells across  
16 this eastern perimeter of the site, and these  
17 results will help us select some of the best  
18 locations for those permanent wells.

19           GARTH ANDERSON: EPA splits.

20           JASON LEIBBERT: And then I forgot to  
21 mention, but Scott reminded me earlier today that in  
22 the March sampling event, when we took all of our  
23 samples from the monitoring wells, EPA had a  
24 sampling crew that worked side by side with ours,  
25 and collected samples from a number of different

1 monitoring wells, mostly in the interior of the site  
2 looking for TCE and RDX contamination.

3 But EPA also analyzed the results for  
4 dioxane -- one-four dioxane and one-four  
5 perchlorate, of which all the results were nondetect  
6 for those constituents.

7 So there's a little bit of corroborating  
8 data that goes along with our March EPA results.

9 Next slide.

10 This one Garth mentioned that briefly, but  
11 I wanted to point out --

12 SCOTT MARQUESS: Jason?

13 JASON LEIBBERT: Yes.

14 SCOTT MARQUESS: Real quick question.

15 LORUS LUETKENHAUS: Did I --

16 Lorus Luetkenhaus.

17 Did I understand you to say that there --  
18 1,4-dioxane was nondetect?

19 JASON LEIBBERT: The sampling -- we don't  
20 sample for that because it's not a DOD related  
21 chemical, but when EPA did their split sampling with  
22 us, they did that analysis, and they found -- well, I  
23 believe they were all nondetect for 1,2-Dioxane.

24 LORUS LUETKENHAUS: I believe they were  
25 detect, am I wrong?



1 SCOTT MARQUESS: Yeah.

2 JASON LEIBBERT: This is more appropriate  
3 for Scott to talk about since they're his results.

4 SCOTT MARQUESS: Scott Marquess with EPA.  
5 Where is my sheet?

6 EPA sampled at one, two, three, four, five  
7 six different well clusters, monitoring well  
8 clusters within the plume.

9 We sampled at 21, and 24, 31, 32, 34, and  
10 43, and those were all nondetect for the  
11 1,4-dioxane and were perchlorate.

12 From last night the results we talked  
13 about were at -- the university's landfill was where  
14 the detections were, up here, we're down gradient of  
15 that.

16 TOM O'HARA: Another question?

17 LYNN MOORER: Mr. Marquess, Lynn Moorer,  
18 where are the EPA's results published --

19 SCOTT MARQUESS: They haven't been.

20 LYNN MOORER: -- for your dioxane testing?

21 SCOTT MARQUESS: They haven't been to  
22 date.

23 LYNN MOORER: When will they be published?

24 SCOTT MARQUESS: Before the next RAB  
25 meeting. I'm not sure in what format or form, maybe

1 we'll put them up on the Corps' web site, or I don't  
2 know, I haven't quite figured out how to do that.

3 LYNN MOORER: And accompanied by a map, so  
4 something that would allow the location to be --

5 SCOTT MARQUESS: Right, it would be the  
6 same wells as here, so the IDs would be included.

7 LYNN MOORER: It would be helpful that  
8 whenever there are results, generally the Corps does  
9 this on their results, that you have a map that goes  
10 along with the test results so that you can find it  
11 visually.

12 Thank you.

13 SCOTT MARQUESS: We can do that.

14 JASON LEIBBERT: Good question, Lorus.  
15 The university work, we weren't there last night so  
16 that's not our thing.

17 LORUS LUETKENHAUS: I just remember seeing  
18 that it was there.

19 JASON LEIBBERT: The AOP Advanced Oxidation  
20 Process at EW-11; those of you that have been  
21 following this site for a while will remember that  
22 in 1997 we thought the extent of contamination was  
23 up here, but then I can't remember exactly what  
24 year, 1999, 2000, we discovered we were wrong about  
25 that, and the extent of contamination was actually

1 all the way down here, and EW-11 is located right  
2 here in the middle.

3 And EW-11 and 8 were located -- previously  
4 when we thought this was the extent of contamination  
5 and these two were going to be out in front of the  
6 contamination and as this continued to migrate with  
7 the direction of ground water flow, these wells will  
8 be able to intercept it and capture that  
9 contamination and bring that into containment.

10 Again, you know, subsequently we found  
11 some different results. EW-12 and 13 are down here  
12 so that they can capture the contamination here.

13 EW-11 has not been in service since it was  
14 installed, and the reason for that was that TCE  
15 contamination of EW-11 at that time, again around  
16 the 2000 time frame, was some of the highest levels  
17 of contamination that were found at the site, and  
18 they were so high that they would cause problems for  
19 the treatment plant that was designed -- the  
20 treatment plant basically wasn't designed to  
21 accommodate those high TCE concentrations.

22 So now that we have this part under  
23 control, now that we have a better understanding of  
24 what's going on over here, we can shift our  
25 attention back to this, and the advanced oxidation

1 process is a way for us to put EW-11 back into  
2 service and start capturing this contamination over  
3 here.

4           And it basically -- how this works is  
5 EW-8 and 11 have a pipeline that carries the water  
6 back to the treatment plant, and what we're going to  
7 do is tap into that pipeline, inject hydrogen  
8 peroxide and ozone into the pipeline that reacts  
9 with the contamination, and -- well, it reacts and  
10 destroys the contamination, so by the time the water  
11 gets all the way back to the treatment plant it  
12 won't be as contaminated, it'll be treated by that  
13 point, and then it'll stay in the treatment plant,  
14 it'll go through the carbon just like everything  
15 else does, and then it goes out to -- the treated  
16 water is discharged just like normal.

17           So this is kind of an innovative  
18 technology to treat this kind of contamination at  
19 these levels without having to build -- well,  
20 without having to significantly modify our treatment  
21 plant.

22           When we tap into that pipeline we'll have  
23 another small building out there where -- where the  
24 injection takes place. We inject the peroxide and  
25 ozone back into the pipeline, it mixes with the

1 water and goes back down to the treatment plant.

2               So this is a significant thing for the  
3 site because it allows us to put EW-11 back into  
4 service. The design is in progress right now.

5               We submitted the draft remedial design to  
6 EPA a couple of weeks ago, so it's under their  
7 review right now, and right now the plan is to kind  
8 of finish that design this year and then hopefully  
9 start construction next year.

10              This is another feature that we wanted to  
11 point out that we have a computer in the library,  
12 the Mead Public Library now that's loaded with the  
13 historical documents, and as we publish new  
14 documents we'll upload those onto the computer.

15              So all those files, all those old reports  
16 should be there. If there's something that you're  
17 looking for that's not on the computer, send us a  
18 note, give us a quick call, and we'll try to get it  
19 on the computer as fast as we can, but everything  
20 that was in the library before should be on the  
21 computer now.

22              GARTH ANDERSON: I'd also like to point  
23 out one of the reasons why we did this is because  
24 the lot -- the documents in the Mead library, it was  
25 relatively uncontrolled. A lot of documents were

1 coming up missing, and there was no way for someone  
2 to view the DVDs of the RAB meetings.

3               So this -- at least with the computer  
4 there you can now access the documents and look at  
5 them on the computer. You can take your -- you  
6 know, you can burn a CD or you can do your little  
7 USB thumb drive and download the documents, or you  
8 can actually view the RAB video if you're interested  
9 in doing that.

10              We have two minutes until the tape runs  
11 out.

12              MELISSA KONECKY: I'm Melissa Konecky.

13              You just said that documents have been  
14 turning up missing?

15              GARTH ANDERSON: Correct.

16              MELISSA KONECKY: Which documents are  
17 those specifically?

18              GARTH ANDERSON: I don't have specific  
19 ones right now, but we go back from time to time and  
20 there's -- sometimes we have to replace documents  
21 that have come up missing, so this is a way that we  
22 can ensure that there's always a complete set at the  
23 library, that they're always accessible.

24              MELISSA KONECKY: About how many documents  
25 have been missing since -- you know, since you

1 started checking?

2 GARTH ANDERSON: I couldn't give you a  
3 number off the top of my head.

4 MELISSA KONECKY: Thank you.

5 GARTH ANDERSON: It looks like our tape is  
6 about to run out, he needs to replace the tape, so  
7 this will be an opportune time for a quick break  
8 while he does a tape change.

9 (Recess taken.)

10 LYNN MOORER: Excuse me, Mr. Anderson, we  
11 were cut off, we were not finished on the point  
12 about the improvements to the document library.

13 I want to pass this to Melissa Konecky  
14 first, she has some information to set the record  
15 straight in response to your last comments.

16 MELISSA KONECKY: Hi, I'm Melissa Konecky.

17 You know, there's been a lot of times that  
18 I've gone to the library to look for documents that  
19 you've said were going to be there and they weren't  
20 there yet, and like, for example, the videos of the  
21 RAB meetings, you know, those -- those weren't  
22 there. You know, at the last RAB meeting we were  
23 told they would be there shortly if they weren't  
24 there already, and then I think they just showed up  
25 last week maybe.

5 LYNN MOORER: That's totally not called  
6 for.

14                   So, you know, I mean I hate to have  
15   anybody think that, you know, people are sneaking  
16   out with stuff under the librarian's nose or that  
17   we're stealing them or something, so --

20 GARTH ANDERSON: Yeah, please.



1 we were suggesting that we're calling the people in  
2 Mead thieves, and I'd like to point out if I can  
3 have the microphone for a second and I'll give it  
4 back.

5 Tom O'Hara, Public Affairs Officer for  
6 the Kansas City District.

7 I want to point out something. I've been  
8 involved in restoration advisory boards when I was  
9 in the Omaha District, we had two in Lawry -- excuse  
10 me, Denver, Colorado, a couple in South Dakota, and  
11 the -- one of the toughest hurdles is these projects  
12 tend to occur over a number of years and the volumes  
13 of information that come up in these things take up  
14 space.

15 And the hurdle of trying to keep that  
16 information current and without dominating local  
17 libraries, especially in the smaller communities, is  
18 something that's been a challenge for me for a  
19 number of years, and we've had documents disappear  
20 in RAB repositories all over the place.

21 So that's not a single accusation against  
22 the Mead community for this project. It's a  
23 recurring dynamic, and I just want to set the record  
24 straight on that. I wasn't aware, because I've been  
25 out of the office most of the summer, that they had

1     done this, and I applaud this effort here, because  
2     this is a good way to first off guarantee it's  
3     current, puts the responsibility on us to load it,  
4     and also that it takes up a small footprint in a  
5     library.

6                 And I haven't spoken with the librarian, I  
7     hope she or he is happy with it because I applaud  
8     this effort.

9                 GARTH ANDERSON: We hope it'll be a good  
10    addition to the library, and I apologize if anyone  
11    took it the wrong way, that we're accusing anybody  
12    of taking any documents.

13                We're certainly not, but these are  
14    documents that are not checked out as you would a  
15    normal library book, and sometimes people may  
16    inadvertently -- you know, they just -- things  
17    disappear sometimes from a place like that, and we  
18    want to make sure that the record is complete so  
19    that these documents are available at all times.

20                LYNN MOORER: Mr. Anderson, this is  
21    Lynn Moorner speaking again.

22                I respectfully request that before you  
23    imply that the local librarian is incompetent or  
24    that things are just going missing, you find the  
25    facts.

1           The facts as we know them locally are that  
2   you have repeatedly not carried through on your  
3   explicit commitments to get things into the library.

4           Like, for example, at the last meeting  
5   Mr. Bigelow explicitly stated DVDs are at the  
6   library, Fed-Ex'd them two weeks ago, I will check  
7   tomorrow is what we said, that meaning the day after  
8   the RAB meeting, to assure that they are there.

9           Those DVDs did not arrive until within the  
10   past week.

11           MELISSA KONECKY:   Week or two.

12           LYNN MOORER:   Week or two, all right.  You  
13   made an explicit promise.  You also made -- and that  
14   was not carried through.

15           What we know are the facts, that Melissa  
16   checks regularly in that library looking -- Vera is  
17   a very honest, competent lady, the librarian,  
18   Melissa checks with her frequently.  We look for the  
19   documents, are they there, they were promised,  
20   they're not there.

21           It is totally irresponsible and  
22   reprehensible for you to try to hide behind -- to  
23   try to cover up your own incompetence and your lack  
24   of honesty with us by implying that it's somebody  
25   else's responsibility, and I reject that.

1           We have seen this happen again and again  
2   and again. You've promised to provide information  
3   and you haven't. At the last meeting, as another  
4   example, I explicitly asked for follow-up  
5   information regarding containment, you explicitly  
6   promised it's in the transcript that the court  
7   reporter prepared. It explicitly says I will do  
8   this, and you did not do that.

9           The examples of you not carrying through  
10   and your cohorts at the Corps are numerous, the  
11   record is long and deep and unfortunate. I ask that  
12   you do not attempt to carry on in that fashion any  
13   further, that is totally unacceptable.

14           I do agree that a computer can be an  
15   effective supplement, but it is -- should not be  
16   regarded as a substitute for hard copies. Most of  
17   us have struggled countless times to try to get a  
18   map that looks like this viewable on a computer  
19   screen.

20           How many people have tried to do that, you  
21   have to scroll this way and that way up and down,  
22   and the same way, looking at long tables of sampling  
23   results, looking at it on the computer is only an  
24   adjunct to or supplement to looking and studying  
25   something in hard copy form.

1           You have not received agreement from the  
2 RAB that it is appropriate to now turn the library  
3 only into electronic information as a substitute for  
4 hard copy documents, and so I suggest you continue  
5 to recognize you've got a responsibility to provide  
6 hard copy documents in an updated and accurate form.

7           I want to close here citing something --  
8 citing some of your own words to you, Mr. Anderson.  
9 This is a letter of February 28th, 2006, to  
10 Mr. Marquess at EPA, and this relates to an EPA  
11 letter that Mr. Marquess wrote regarding the draft  
12 final 2004 annual report dated February 1, 2006.

13           So to give you a sense of context, these  
14 are EPA's comments or some of EPA's comments  
15 regarding the annual report that the Corps drafted  
16 summarizing or compiling their sampling -- the  
17 ground water sampling for 2004.

18           And this is quoting from your letter. It  
19 says: EPA's letter indicated that the draft final  
20 2004 annual report as written does not present an  
21 accurate portrayal of the site.

22           KCD, meaning Kansas City District, takes  
23 strong exception to this assertion and other  
24 statements contained in the February 1st letter.

25           The KCD maintains that the presentation of

1 data in the draft final 2004 annual report is an  
2 accurate and satisfactory representation of all  
3 sampling results obtained during the calendar year  
4 2004.

5 The EPA has implied that any interested  
6 party should be able to gain a complete  
7 understanding of site conditions by reviewing a  
8 single GMP report, which stands for ground water  
9 monitoring program.

10 In KCD's opinion, this expectation is not  
11 reasonable. In order to gain a complete  
12 understanding of site conditions stakeholders must  
13 perform due diligence by giving consideration to the  
14 many different reports that document all of the  
15 investigative work performed at this site since  
16 1987 -- excuse me, 1989.

17 There is not one single report that can be  
18 updated on an annual basis to provide a new  
19 characterization of the horizontal and vertical  
20 extent of the contamination.

21 Now listen to this: Stakeholder and  
22 interested parties must review each annual ground  
23 water monitoring report in the context of all the  
24 other reports preceding it.

25 And then he concludes, the pertinent

1 documentation of current and past investigation  
2 results is readily available to the public and any  
3 interested party.

4 Well, that simply is not true. We know  
5 from experience over and over and over that that  
6 library does not contain anything approaching all of  
7 the reports.

8 Did you not, Ms. Konecky, do recently a  
9 file review at DEQ and discover that there was a  
10 vast difference between the documents that were at  
11 DEQ and available, orders of magnitude more  
12 documents at DEQ than there were in the library,  
13 right?

14 MELISSA KONECKY: Right, yes.

15 LYNN MOORER: We know from experience  
16 there's no way that you can begin to understand  
17 completely what's going on with this site even in  
18 reviewing all the reports that you find because you  
19 don't make them available in a timely fashion.

20 That library really, really has suffered,  
21 and it's been your responsibility, and it is totally  
22 unfair and inappropriate for you to try to shift  
23 responsibility to the librarian or to the people in  
24 the community.

25 GARTH ANDERSON: Thank you.

1           Okay. We hope that with the improvements  
2 we're making to the library, that you can go check  
3 out on the computer, and please give us some  
4 feedback on that so we can continuously improve  
5 what's in the library.

6           JASON LEIBBERT: Some of the presentation  
7 slides that we've covered so far has basically been  
8 a summary of the work that was performed since the  
9 last RAB meeting in the last three months or so.

10           Now we're into the part of the  
11 presentation where we talk about upcoming work and  
12 what are we going to be doing for the next three  
13 months at the site.

14           And building on Harold's question and some  
15 of the other questions about the -- what do we do  
16 with those sampling results, the -- one of our  
17 primary objectives for this year is to install a  
18 number of new monitoring wells on the east and then  
19 also some additional monitoring wells on the south.

20           And the purpose of all these monitoring  
21 wells is to help us monitor the extent of the  
22 contamination and be able to look for any changes  
23 over time and to provide evidence that the  
24 extraction well system is capturing all the  
25 contaminated groundwater the way that it's supposed



1 to.

2           This is -- the way we're going to  
3 accomplish this is a couple of different ways. Each  
4 of the extraction wells have observation wells,  
5 which are basically piezometers associated with  
6 them.

7           So we're going to install more observation  
8 wells across the southern part of the site near all  
9 the extraction wells, and that will help us gauge  
10 the performance of those transaction wells and be  
11 able to demonstrate in the future that they're  
12 operating properly and producing a hydraulic capture  
13 zone sufficient to capture the hydraulic  
14 contamination, and there's about 30 of those new  
15 observation wells, there's about 70 there already,  
16 so another 50 percent increase or thereabouts.

17           More monitoring wells along the south,  
18 there's already some -- there's already about 35 or  
19 so monitoring wells across the south, there's here,  
20 here, here, here, here, here, here, and then these  
21 over here are associated with Load Line 1, so -- but  
22 for this part of the plume there's a few already.  
23 We have plans to put in 33 more, this is part of the  
24 containment evaluation work plan that's being  
25 reviewed by EPA right now, which we'll talk about a

1     little bit more in a few minutes.

2                 And then obviously back to the eastern  
3     side, the exact number, we're still working on that  
4     based on these results, trying to select the best  
5     locations for those new monitoring wells, but it'll  
6     be around 30, 35, 40 new monitoring wells in this  
7     area in addition to the monitoring wells that are  
8     already here.

9                 Down here there's several monitoring wells  
10    already. This is probably the area that needs the  
11    most work wherein the sense that we don't have any  
12    monitoring wells that belong to us in this area, and  
13    then there's a few up here, but we'll end up putting  
14    some monitoring wells up here to address this part  
15    of the plume.

16                So, again, if you've come to these  
17    meetings before you've heard this plan, this  
18    approach before. Again, this has been our plan all  
19    along is to install new monitoring wells to be able  
20    to -- be able to see any changes in the extent of  
21    contamination over time.

22                So this is the part of the presentation,  
23    it's the good stuff, I think it's the stuff that you  
24    guys have been waiting for, the containment  
25    evaluation.

1           The idea of containment evaluation has  
2   been the topic of, well, the past couple of RAB  
3   meetings in a row now, and it's the question of how  
4   do you know that the extraction well system is  
5   capturing all the contaminated ground water that  
6   it's supposed to, and the answer is we basically do  
7   that once a year.

8           During the course of the year we collect  
9   data and measurements from all over the site, and  
10   the local results for monitoring wells, water level  
11   measurements from monitoring wells, water level  
12   measurements from piezometers and observation wells,  
13   we include the pumping rates for each one of our  
14   extraction wells, we look to the outside sources  
15   such as USGS and their gauging stations on like the  
16   Platte River, I think there's one on Johnson, and I  
17   think there's a US gauging gaming station on  
18   Silver Creek.

19           We look at that, we also get information  
20   from Lower Platte NRD, we do this evaluation, we put  
21   all that information together, we look at that in  
22   the context of the ground water model, and we make a  
23   determination that the extraction well system is  
24   capturing all the contaminated ground water that  
25   it's supposed to; that's the process in a nutshell.

1           What we're going to start doing starting  
2 next year is documenting all that in something  
3 called the annual remedy performance report.

4           It's a new document that's not been  
5 generated in the past, and the purpose of that  
6 document is to kind of take the place of the annual  
7 report and then include the containment evaluation.

8           So, again, it's the -- how you do that,  
9 how you make that determination is you look at the  
10 ground water model, and if you remember when we  
11 talked about the model back in March, it's kind of  
12 a -- the model is a predictive tool, you use the  
13 model to predict where the groundwater is going to  
14 go in the future, what direction and how fast is it  
15 going to go, is it being captured by our extraction  
16 wells or is it moving in a direction where it's not  
17 being captured.

18          The model predicts all that for us, and  
19 then we go out and we check those results by  
20 collecting all those measurements, we sample these  
21 wells, we sample or we take water level measurements  
22 from all across the sites, and that's how we verify  
23 that the predictions of the model, you know, were  
24 good or not good or need to be revised, and that  
25 it's kind of a cycle of continuous improvement.

1                   LORUS LUETKENHAUS: Now, this ground water  
2 model, is that your in-house model or MUD's model?

3                   JASON LEIBBERT: That's our model that we  
4 placed.

5                   LORUS LUETKENHAUS: Thanks.

6                   JASON LEIBBERT: So, again, it's a  
7 combination of many different things. It's many  
8 different types of data that we collect throughout  
9 the year, it's a combination of using the model,  
10 it's a combination of comparing the model to actual  
11 results.

12                   That process will be documented in the  
13 annual report again starting in next year, so around  
14 the middle of 2007 we'll publish this report, and  
15 it'll cover the year 2006.

16                   And that is actually the end of all our  
17 slides.

18                   So I propose a day for the next  
19 RAB meeting, October 19th, let us know if that's not  
20 a good date, we can change that. Have any  
21 suggestions about topics for the next meeting,  
22 please send those to Garth, and we'll include those,  
23 and we'll open it for questions.

24                   LARRY ANGLE: Larry Angle, Lower Platte  
25 North NRD.

1           Question on the surface water sample that  
2   was done: Of course, it's showing up at SW-10; when  
3   was the last time SW-13 was sampled, which is  
4   further downstream?

5           JASON LEIBBERT: We do all of them.

6           BRADDEN BIGELOW: I'll look it up.

7           JASON LEIBBERT: Brady's going to verify  
8   that for us on the computer, the database.

9           What I remember is that in March -- well,  
10   I better not say. I better wait for the results.

11           I think it was sampled and it was  
12   nondetect, but we'll check the database and make  
13   sure that's correct.

14           LARRY ANGLE: The reason I ask is, of  
15   course, TCE tends to volatilize off and it'd be  
16   interesting to see if there's any present in SW-13.

17           JASON LEIBBERT: I can say that SW-13 has  
18   been sampled in the past and in the past it's been  
19   nondetect every time we go to look for it.

20           LARRY ANGLE: Okay.

21           JASON LEIBBERT: And I believe the same  
22   thing is true about SW-12; I think every time SW-12  
23   has been sampled it was nondetect or below action  
24   level, but I'd have to look at the data to make sure  
25   that's completely accurate.

1 LORUS LUETKENHAUS: (Inaudible comment.)

2 JASON LEIBBERT: Methylene Chloride, below the  
3 action level.

4 LORUS LUETKENHAUS: Load Line 1, on your  
5 filter plant.

6 VIDEOGRAPHER: Name, please.

7 LORUS LUETKENHAUS: Sorry,  
8 Lorus Luetkenhaus.

9 Is Extraction Well 13 operational now?

10 JASON LEIBBERT: 13 is not in service.  
11 EW-12 is pumping at a rate of 325 gallons per  
12 minutes. EW-13 was installed, we drilled it, we  
13 installed the extraction well, we put a pump in  
14 there, started to pump it and found out that it  
15 didn't produce as much water as what we thought it  
16 was going to produce, so since then it's been out of  
17 service.

18 We're looking at that right now trying to  
19 decide if EW-12 is going to do the job all by  
20 itself, which all indications are is probably true,  
21 maybe we don't need Extraction Well 13 at all, but  
22 that's something that's in progress right now and  
23 again will be reviewed by EPA and DEQ.

24 LORUS LUETKENHAUS: Okay. And who did  
25 your initial engineering on that, in-house or did

1     you have someone else do it?

2                 JASON LEIBBERT:   That design was produced  
3     by our engineering firm, URS Corporation.

4                 LORUS LUETKENHAUS:   Okay.   And if it  
5     required 500 gallons a minute as I recall a slide  
6     about -- I'm going to guess about two years ago, you  
7     with figuring on the water goes past those wells and  
8     you were going to suck it back into the wells and  
9     run it through the filter plant, correct?

10                JASON LEIBBERT:   Basically.

11                LORUS LUETKENHAUS:   Okay.   Now, if they  
12     said you needed 500 gallons a minute running through  
13     that filter plant to suck all this contamination  
14     back into it, how are you doing that at 325 gallons  
15     then?

16                JASON LEIBBERT:   That initial flow rate  
17     was a prediction, so what we found was that -- so  
18     far what we found since this has been operational is  
19     that EW-12 is actually working better than what we  
20     predicted in terms of it generates a larger  
21     hydraulic capture zone than what was originally  
22     predicted as part of the design.

23                So that's where we're at right now, is  
24     we're trying to collect enough data.   It's only been  
25     operating since February, so it's only a few months.



1 The best way to make that determination is to go  
2 for, you know, six or nine or twelve months to see  
3 if there's any sort of variation, any sort of  
4 seasonal effects, but all indications are right now  
5 this EW-12 is doing a pretty good job all by itself,  
6 and we may not even need EW-13.

7 LORUS LUETKENHAUS: So in the future we're  
8 not going to get a surprise that that plume has  
9 moved farther downstream, more south?

10 JASON LEIBBERT: Well, maybe you've  
11 already seen some of the reports that we've  
12 published.

13 We've seen detections of TCE on the south  
14 side of EW-12 and 13. The question is are those  
15 being contained within the hydraulic capture zone  
16 generated by EW-12.

17 That's also in progress. That's part of  
18 this whole evaluation of, you know, is this working  
19 the way it's supposed to, is it capturing everything  
20 it's supposed to. That determination is in the  
21 works right now.

22 LORUS LUETKENHAUS: All right. Thank you.

23 JASON LEIBBERT: And I'll just -- you  
24 know, as we were just talking about containment, the  
25 next year when we publish the annual remedy

1 performance report, that'll be addressed because  
2 it's part of the whole containment question, is the  
3 system working the way it's supposed to.

4 MELISSA KONECKY: I'm Melissa Konecky.

5 At one of our previous RAB meetings, it  
6 was probably the April one, you guys were talking  
7 about some of the things that the next ground water  
8 model would include like more detailed sensitivity  
9 analysis, describing all of the additional outside  
10 influences, how many irrigation wells that the next  
11 ground water model would include, and I just  
12 wonder if you could explain to all of us what does  
13 the more detailed sensitivity analysis in the next  
14 groundwater model consist of.

15 JASON LEIBBERT: Well, I'm glad you asked  
16 that question because we have addressed those  
17 questions. There's a handout on the back table  
18 where we tried to address those questions.

19 The way the questions were written it asks  
20 for very specific detailed information.

21 MELISSA KONECKY: Yes.

22 JASON LEIBBERT: The groundwater model is  
23 in the works right now.

24 LYNN MOORER: Where is the handout, what  
25 does it look like?

1                   JASON LEIBBERT: It should be on the  
2 table.

3                   LYNN MOORER: I don't think I saw that.  
4 Was it a fact sheet?

5                   JASON LEIBBERT: Well, let's look again  
6 because I think I got this one off the table.

7                   GARTH ANDERSON: Let me go back and help.

8                   JASON LEIBBERT: And if they're not here  
9 we can give you one. We can put them on the  
10 computer or we can put them on the web site.

11                  GARTH ANDERSON: We got them, our  
12 apologies.

13                  JASON LEIBBERT: We'll give these folks a  
14 minute to look at the fact sheet. Brady has the  
15 answer to Larry's question about surface water  
16 sampling results.

17                  Surface Water 13 was last sampled in 2004,  
18 it was nondetect; SW-12, which is up gradient, but  
19 outside the extent of contamination, was sampled a  
20 few months ago in March, and it had a reported value  
21 of .9 PPB TCE, and that was also J flagged.

22                  I want to say SW-12 is one of our regular  
23 ones.

24                  BRADDEN BIGELOW: Yeah, it is.

25                  MELISSA KONECKY: So I guess the answers

1 to the questions are unknown as of now?

2 LYNN MOORER: It's premature to ask,  
3 that's what it's saying basically, how dare you ask.

4 JASON LEIBBERT: So there's a question  
5 about what does the detailed sensitivity analysis of  
6 the model consist of, how many irrigation wells will  
7 the model include, outside influences; I think we've  
8 covered the rest of them.

9 Go ahead, Melissa.

10 MELISSA KONECKY: Well, I mean just  
11 generally the sorts of things that would, you know,  
12 just generally when you do a groundwater model, I  
13 mean what -- what inputs indicate more or less  
14 sensitivity? I mean, you know, as far as like  
15 conductivity and all that kind of stuff, is that  
16 what you're referring to, or --

17 JASON LEIBBERT: If it's okay I'll start  
18 with the easier ones first and then we will get to  
19 sensitivity analysis.

20 MELISSA KONECKY: Okay.

21 JASON LEIBBERT: Question No. 3  
22 actually -- this fact sheet is in response to an  
23 e-mail that we got from Melissa; she had six  
24 questions.

25 The third question that she asked was:

1 Please describe all outside influences that the next  
2 RDGM, which is our groundwater model, will include.

3 If you remember when we talked about the  
4 model in March, when you -- when you create a  
5 numerical model you look at as many outside  
6 influences that are present at the site you're  
7 looking at.

8 So what this means for us is we look at  
9 natural features, such as the Platte River, such as  
10 Johnson Creek, Clear Creek, Silver Creek,  
11 Wahoo Creek, because those exert an influence over  
12 the groundwater flow and direction, we look at  
13 man-made influences such as irrigation wells, both  
14 outside of the plume and also within the plume, we  
15 look at municipal supply wells like Ashland,  
16 Lincoln, and then the big one in this case, which  
17 every one is concerned about, is the MUD Platte West  
18 Well Field.

19 So the model that we're working on right  
20 now, our groundwater model, will include all those  
21 things.

22 Next one.

23 One of the other questions Melissa asked  
24 in her letter to us was how many irrigation wells  
25 will the next RDGM include and how is this number

1 arrived at?

2 I don't have an exact number here for you  
3 tonight. The process by which that is determined is  
4 we start by going to the State of Nebraska. I think  
5 it's Nebraska DNR, Department of Natural Resources,  
6 that maintains a registered well database.

7 So theoretically everyone in Nebraska that  
8 drills an irrigation well registers that well with  
9 the State of Nebraska, so that database can give us  
10 a location of that well and it can also give us a --  
11 I can't remember if the database has an estimated  
12 pumping rate or not.

13 If it's not in the database then we go  
14 through other efforts to try to make our own  
15 estimates on those pumping rates, so it's kind of  
16 the first step.

17 And what we would do is we would search  
18 the database for all irrigation wells that are in,  
19 you know, this general area.

20 The groundwater model that URS is working  
21 on right now is actually a little bit bigger than  
22 the area covered by this map, but -- so we can talk  
23 about it. We would just look at that database and  
24 tell the database to tell us where all the  
25 irrigation wells are in this area, and then we would

1 look at those results and we would try to identify  
2 any sort of errors or inconsistencies.

3 Sometimes the same well is listed twice in  
4 the database, you know, so that's something that has  
5 to be fixed, those sorts of things, to make sure  
6 that they're accurate, and if there's things that we  
7 have questions about we can contact the owner of  
8 that well in the database to try to get  
9 clarifications.

10 And then once we have all those wells  
11 identified, we try to assign them a pumping rate and  
12 a pumping schedule. We know that irrigation wells  
13 only operate during certain times of the year, so we  
14 put that information in the model, an estimated  
15 pumping schedule.

16 We know that some irrigation wells do  
17 more, they pump more water than others, so we try to  
18 assign a pumping rate to each one of those  
19 irrigation wells.

20 All that is part of the development of the  
21 model. As we revise the model and we do updates,  
22 the last version of this model was done in 2004, so  
22 in 2004 we went through this process. We identified  
24 all those irrigation wells in 2004.

25 What we're doing now is to look for the

1 differences between 2004 and 2006. Are there any  
2 new irrigations wells that have been installed since  
3 2004; I don't know the answer to that question  
4 exactly right here at this moment. The chances are  
5 there's probably a few, and when we find those we'll  
6 include those in the new version of the model.

7           And then the last question about  
8 sensitivity analysis about the model, sensitivity  
9 analysis is a process of basically you go through  
10 the work of creating your model and you define all  
11 of these different things, you define were all the  
12 irrigation wells are and the river and the surface  
13 water, the creeks, and, you know, everything you  
14 know about the site, hydraulic conductivity and  
15 transmissivity and storativity, and all those  
16 parameters that you gain when you do testing at the  
17 site.

18           You put all that into the model and then  
19 once that's complete you do two things: Is you do  
20 calibration and you do sensitivity analysis.

21           Calibration is where you tell the model to  
22 do its simulation, and then you compare those  
23 results to actual known results that you already  
24 know about the site, and the easiest example of that  
25 is water levels.



1           The model will predict that at Monitoring  
2 Well 13 the water level should be, you know, 83 feet  
3 below ground surface. That's what the model says,  
4 and then we go out and check it, we actually go out  
5 to this well and we take a measurement, we take a  
6 reading to see what the real water level really is,  
7 and if it's close enough to what the model predicted  
8 then that tells us that the model did a good job of  
9 simulating the hydraulic properties around MW-33.

10           So we do that across the whole site.  
11 We -- calibration's probably one of the most  
12 important things you do in developing the  
13 groundwater model, so we look to get a lot of  
14 information, like we talked about before, data from  
15 Lower Platte NRD, data from USGS; all that stuff  
16 helps us calibrate our model.

17           LYNN MOORER: Excuse me, Mr. Leibbert,  
18 while you take a breath, you said if the actual  
19 level is close enough; what do you use as an  
20 acceptable error rate?

21           JASON LEIBBERT: I'd have to check on  
22 exactly what it is. You can do a couple of  
23 difference statistical comparisons. You can look at  
24 linear regression, you can look at root means  
25 square. There is -- there is a threshold that, you

1 know, general practice, you know, in the engineering  
2 community and geology community says that if it's  
3 within this range it's a good match, if it's not in  
4 this range it's not a good match. I don't know what  
5 that number is off the top of my head.

6 We can look it up and get back to you, but  
7 I don't know what that threshold is. It's plus or  
8 minus 10 percent, something like that.

9 LYNN MOORER: That's a specific question I  
10 again ask to be followed up on after this meeting  
11 and well prior to the next RAB meeting. Thank you.

12 JASON LEIBBERT: Okay. That's an easy  
13 one.

14 That's calibration. Sensitivity analysis  
15 is a little bit different. Sensitivity analysis is  
16 the process by which you go into the model and you  
17 artificially change different perimeters.

18 You artificially change the hydraulic  
19 conductivity, you artificially change  
20 transmissivity, which are aquifer properties that  
21 relate to how much water you can extract from a well  
22 and how much drawdown in the well results of that.

23 This is something that the modeler does  
24 that again as a check against his work to make sure  
25 that the model is doing a good job of simulating

1     what we actually see.

2                 So the sensitivity analysis modeler will  
3     go in and artificially change those perimeters, and  
4     then he'll run the simulation again and see what's  
5     different, see if he gets a different answer this  
6     time, and then he'll change a different perimeter  
7     and see if he gets a different answer, then he'll  
8     change a different perimeter and see if he gets a  
9     different answer.

10                And you do that, the purpose of doing that  
11     is to see how does the model respond to these  
12     artificial changes, and what that looks like or what  
13     that reveals is, depending on how you constructed  
14     your model and what kind of information you've  
15     included in it, the results of that could come back  
16     and say this model is very sensitive to changes in  
17     hydraulic conductivity; that if you change the  
18     hydraulic conductivity just one little bit you get  
19     much different results from the model.

20                What that means is you need to put more  
21     work or more effort into determining what the  
22     hydraulic conductivity is at your site, because if  
23     you're just a little bit wrong about that you're  
24     going to get much different answers from your model.

25                And then the opposite of that is also

1 important information: If you change the hydraulic  
2 conductivity -- if you change the hydraulic  
3 conductivity and you don't get different results,  
4 that means the model is insensitive or not sensitive  
5 to changes in hydraulic conductivity.

6 That could be no problem or that could be  
7 a sign that your model has something wrong with it  
8 because you should expect that if you change the  
9 hydraulic conductivity you would get different  
10 results.

11 So it's an indicator that the modeler uses  
12 to judge his work and judge is the model constructed  
13 well or is it not constructed well.

14 There was some -- the reason I -- I'll  
15 speculate on why you brought this question up, is  
16 Dr. Zurbuchen, from the Nebraska DEQ, asked us a  
17 very similar sort of question, and I don't recall  
18 his exact comment that he sent to us about our  
19 model, but the gist of it was that he wanted us to  
20 do more work on the sensitivity analysis part of --  
21 of the model and the process that we go through when  
22 we create the model. He wanted to us put more work  
23 into that sensitivity analysis, and he had some  
24 specific suggestions although I don't recall exactly  
25 what they are right now right this minute.

1           Our response to Dr. Zurbuchen was we  
2   agreed, and the next time we get ready to update the  
3   model we'll do more work in regards to sensitivity  
4   analysis and follow your suggestions; that's what's  
5   in progress right now.

6           Our groundwater model, we're scheduled to  
7   have a report published later this year, September  
8   this year maybe.

9           GARTH ANDERSON:   Yes.

10          JASON LEIBBERT:   I'll have to check the  
11   schedule.  Again, that model will be subject to  
12   review by EPA and DEQ, you know, hopefully we think  
13   we've addressed all those comments that we got from  
14   the agencies previously, and we'll see if they have  
15   any new comments for us.

16          And so I think -- you know, you tell me if  
17   that answered your question.

18          MELISSA KONECKY:   Yeah, I think.

19          HAROLD KOLB:   I noticed on the Artesian  
20   test up there on Johnson Creek, that thing just  
21   keeps going up and up and up.  Now, the TCE, I  
22   understand, just boils off into the air, but the RDX  
23   keeps going up, and where does RDX -- the test for  
24   the RDX keeps going up; where is the RDX going?

25          JASON LEIBBERT:   The Artesian Well is

1 right here, and it is close to Johnson Creek and  
2 it's right in kind of the middle of this part of the  
3 plume right here. This is TCE, the blue is RDX and  
4 then this is some areas where it's co-mingled where  
5 you find both RDX and TCE.

6           The Artesian Well is just that, and if  
7 you're not familiar with the definition of artesian  
8 conditions, it means that groundwater comes to the  
9 surface naturally at that point. One way to think  
10 about it is like a spring almost.

11           I've not seen -- I can't remember who the  
12 Artesian Well belongs to. I've not seen it myself,  
13 but it's been described to me basically that it's a  
14 pipe stuck in the ground and groundwater comes out  
15 of the end of the pipe, and I'm not sure if -- I'm  
16 not sure how much -- I don't know if that flow rate  
17 changes over the course of the year or not.

18           We started sampling it because we thought  
19 that it was -- we were treating it like a water  
20 supply well. We were treating it like a residential  
21 supply well, and then once we found out that it's  
22 not a supply well we made the determination that  
23 we'll handle it like a surface water result, so it  
24 gets sampled in the same group that the surface  
25 water samples gets collected on the same frequency

1 and it gets reported that way.

2 The results do show increasing trends  
3 over, I can't remember, the past six or past eight  
4 quarters, which is good information to have but it's  
5 within the extent of contamination, it's within the  
6 plume.

7 It's being captured by EW-1 and 2, you  
8 know, the combination of these two extraction wells  
9 capture this part of the plume.

10 HAROLD KOLB: But the RDX is coming up to  
11 the surface, so it's boiling to the surface and  
12 running out of that property, but yet it doesn't  
13 show anything on the surface waters downstream  
14 because it's being diluted by the treated water I  
15 assume.

16 But that water is not being caught at EW-1  
17 or 2 because it's coming to the surface and running  
18 off as surface water, so --

19 JASON LEIBBERT: Right.

20 HAROLD KOLB: -- it's still there, but  
21 it's diluted further downstream I guess, is that all  
22 that's happening there?

23 JASON LEIBBERT: Surface water continues  
24 to run off and drain as surface water does either  
25 through bodies like Johnson Creek or Clear Creek or

1 through ditches that only carry water when it rains  
2 or that kind of thing, so, yes, you're correct,  
3 surface water comes to the surface and then where  
4 does it go from there?

5           The fate of RDX in the environment is such  
6 that it will -- the concentrations that we're  
7 talking about here are actually pretty low, even  
8 though they're higher than two, they're still quite  
9 low.

10           Every time it rains that will transport  
11 that, you know, basically all of that ends up in the  
12 surface water somewhere. It ends up in a creek  
13 somewhere.

14           Just one thing to keep in mind is similar  
15 to the discussion we had about what's the  
16 appropriate standard, but the cleanup standard for  
17 this site for RDX is two parts per billion, and  
18 that's based on drinking water.

19           If you were to come up with a standard for  
20 RDX that was not based on drinking water you'd come  
21 up with a number much higher similar to the example  
22 of TCE.

23           The number for TCE by the State of  
24 Nebraska is 810 parts per billion in surface water.  
25 Nebraska does not have a surface water quality



1 standard defined for RDX, because it's just  
2 something that doesn't appear in their regulations.

3 But this falls into the same category as  
4 what we talked about, that is part of the surface  
5 water evaluation that we're working on with EPA  
6 right now in trying to verify what is the  
7 appropriate standard, because the drinking water is  
8 not the right standard to apply to surface water.  
9 It needs to be something else.

10 We have one from the State of Nebraska for  
11 TCE, we don't have one for RDX; that's something  
12 that we can generate ourselves, you know, in  
13 conjunction with the agencies, that's something that  
14 is being worked on right now.

15 HAROLD KOLB: Back to those geoprobe wells  
16 that you have, the geoprobe tests; are you going to  
17 go back to the same GPS locations and retest those,  
18 and -- I know you're going to put down more  
19 monitoring wells, but there's still -- you can't  
20 have a monitoring well every ten feet, so are you  
21 going back and test those at the same locations, the  
22 ones that had a hit?

23 JASON LEIBBERT: No, we won't be going  
24 back to every single geoprobe to the exact location  
25 to every single one that had a hit.

1               HAROLD KOLB:   Why not?

2               JASON LEIBBERT:   Because if they're below  
3   action level they're below action level, but what we  
4   will do in the future in terms of investigation is  
5   go back to areas that need more -- that need more  
6   investigative work.

7               The investigation work for this eastern  
8   perimeter is actually quite complete and we have a  
9   very good picture based on those results.

10              Interior, on this part of the site, not so  
11   much.   This is what we have to go on, it's time to  
12   update this.   We'll be doing more work in this part  
13   of the site over the years, but for this part we  
14   probably don't need to be doing any more geoprobe  
15   around here.

16              We need to install more monitoring wells  
17   along here, agreed, so that we have the capability  
18   of watching this over time, to see if it changes  
19   shape or if it changes direction.

20              HAROLD KOLB:   Isn't that the  
21   responsibility of MUD?

22              JASON LEIBBERT:   No, actually the Army is  
23   responsible for determining the extent of  
24   contamination and verifying the extent of the  
25   contamination over time.

1                   HAROLD KOLB: Are you going to put any  
2 extraction wells going through these tests down in  
3 the center where the stuff is really bad like EW-11,  
4 or are you going to put the wells in the -- where  
5 the pollution comes from or are you just going to  
6 keep catching the edges?

7                   JASON LEIBBERT: That's a really good  
8 question, I'm glad you asked that.

9                   EW-11 is a very good location in terms of  
10 there's a lot of contamination right here, so if we  
11 can put EW-11 back into service we'll be doing a  
12 good work.

13                   You know, there are high levels of  
14 contamination right there, and that'll allow us to  
15 capture that, treat it, not have a negative impact  
16 on our treatment plant and do some more cleanup  
17 action right here.

18                   Your question about will you put more  
19 extraction wells in other areas where you see  
20 high concentrations?

21                   Extraction wells, probably not;  
22 groundwater circulation wells, yes, maybe,  
23 hopefully; that's our plan, that's the intent.

24                   We didn't talk much about the -- these  
25 geoprobe results. In here, in this part of the

1 plume, that the focus is really on determining this  
2 perimeter, which we did a pretty good job of it, but  
3 these transects, these other points, reveal that  
4 there's some localized areas in here where there are  
5 very high concentrations compared to what's out here  
6 on the perimeter.

7 Out here on the perimeter there's five or  
8 less parts per billion of TCE; in here there may be  
9 several hundred parts per billion TCE, and that's a  
10 good candidate for a location for a GCW, a  
11 groundwater circulation well.

12 If you remember there's two groundwater  
13 circulation wells in service right now, and  
14 basically how that works is it's one well that's  
15 installed in the ground, and there's two inlets to  
16 that well, there's two screens, and the -- the  
17 system takes water out of one screen, brings it up  
18 to the surface, brings it up into a small little  
19 miniature treatment plant, treats it right there on  
20 the spot, and then puts the treated water back into  
21 the same well, and it goes back go out into the  
22 aquifer through the -- through the other screen interval.

23 So basically what that is, is we're  
24 getting treatment at that location but we're not  
25 taking water out of the aquifer, you know, we're not

1 taking water away from the whole system.

2           You know, so as a -- if we were to put a  
3 GCW right here, you know, we would put it, you know,  
4 right in the middle of a hot spot, and that water  
5 would continue to be treated over time.

6           Another benefit of the groundwater  
7 circulation wells is that water can make multiple  
8 passes through the circulation well, it'll get  
9 sucked up, it'll get treated, it'll go back out into  
10 the formation, and it'll either get away or it'll be  
11 sucked up again.

12           And it kind of depends on the groundwater  
13 velocity, and there's other things that can  
14 influence that, but you do get multiple treatment  
15 passes through that.

16           So again, if you remember way back when  
17 this whole extraction well was being designed,  
18 there was a lot of concern about taking too much  
19 water out of the aquifer if we just extract it, put  
20 it in a creek, you know, then we're taking it out of  
21 the aquifer.

22           Groundwater circulation wells are a great  
23 way to avoid that. You know, we don't have to  
24 install more extraction wells, we can do more GCWs  
25 instead.

1                   HAROLD KOLB:  How effective are those  
2   GCWs?

3                   JASON LEIBBERT:  The two GCWs that we have  
4   right now are actually working really great.  
5   Effective -- excuse me.

6                   As in treatment efficiency, the two GCWs have  
7   different treatment technologies.  One of them is  
8   based on -- excuse me, is based on an ultraviolet  
9   treatment system, and that's for the RDX  
10  contamination.

11                  LYNN MOORER:  (Inaudible comment.)

12                  JASON LEIBBERT:  GCW-2 is over here, and  
13  this is one that treats RDX contamination, and it  
14  treats it with an ultraviolet process, and the  
15  groundwater contamination is pulled up, it goes  
16  through a small little treatment system where it's  
17  exposed to ultraviolet light.

18                  That ultraviolet light actually breaks the  
19  RDX molecules, it destroys the RDX and treats it in  
20  that fashion, so the water that goes back into the  
21  formation has been treated for RDX.

22                  GCW-1, which is up here, is a little bit  
23  different.  This has a tiny little airstripper  
24  installed here, and this treats TCE contaminated  
25  water.

1           And also, for those of you that are  
2   familiar with the site, know that there's a wind  
3   turbine here that helps power that system. That's  
4   kind of an experiment that we have going with the  
5   University of Missouri to evaluate the economics  
6   that -- does that result in any sort of cost savings  
7   by using a wind turbine to generate power to run that system.

8           That study is in progress now, but those  
9   two GCWs actually do a very good of  
10   treating water --

11           HAROLD KOLB: How many GCWs are planned  
12   versus regular EWs, and is there any way we can get  
13   that water that's being wasted now pumped back up  
14   somewhere in there to create a wetland or something  
15   rather than just wasting this water down the creek,  
16   because it's going to be factor here in a few years.

17           JASON LEIBBERT: Well, it -- I wasn't  
18   around five or ten years ago on this project when  
19   all this was being discussed, you know the history  
20   better than I do.

21           The -- the water that's treated by the  
22   treatment plant right now during the summertime,  
23   almost every bit of that gets used by other people  
24   for irrigation, so that water, during those -- that  
25   time of the year is not being discharged to the

1 creek, it's not being wasted.

2           During off times, when there's no  
3 irrigation necessary, yes, it goes back into the  
4 creeks.

5           Can we do something different with that,  
6 can we change that? That's a bigger question than  
7 what we're going to be able to answer tonight. I  
8 don't know, you know, that's -- that decision was  
9 very long in the making, and it'll be long in the  
10 changing.

11           But your question about how many GCWs,  
12 that is up in the air, and it kind of depends on how  
13 many different hot spots will we find across the  
14 site.

15           And I also want to point out that GCW is a  
16 way that's been used at this site. We have these  
17 two that are working well already. There's other  
18 things you can do with TCE contamination; there's  
19 other things you can do with RDX contamination that  
20 don't require extraction wells, but GCWs is what we  
21 have so far and that's what we have experience with.

22           So I don't have a good feeling for how  
23 many GCWs will the army install. It depends on how  
24 many hot spots we find, it depends on, you know,  
25 will it -- will it be effective.



1           You know, there may be some areas of the  
2   site where even though you have high levels of  
3   contamination the geology may be such that the  
4   circulation wells won't work there, you won't get  
5   the extraction, excuse me, and reinjection to be  
6   able to work properly.

7           So -- but the intent is, the plan is to  
8   start putting more of those in to treat some of  
9   these hot spots. I just can't tell you how many.

10           HAROLD KOLB: What's the time frame?

11           JASON LEIBBERT: Well, that's another good  
12   question.

13           So far, you know, in the past couple of  
14   years our focus, and I think everyone else's focus  
15   has been on this eastern perimeter. Everyone is  
16   concerned about what's going to happen in the future  
17   around this part of the site. That's where all our  
18   work, all of our money has been going, is in here.

19           To complement that, when we found this,  
20   every one knew we had a problem and everyone knew we  
21   were out of containment, and therefore not in  
22   compliance with the requirements that we're  
23   obligated to meet, so this was the No. 1 priority  
24   for a while.

25           Now that this is basically under control,

1 now that this is not necessarily under control but  
2 we'll have monitoring wells by the end of the year,  
3 you know, this will basically be, you know,  
4 stabilized, taken care of.

5 So now, you know, this is okay, this is  
6 okay, now we can start shifting our focus to the  
7 interior of the plume, and see what can we do inside  
8 of here to make the cleanup better, to make the  
9 cleanup go faster, all those kinds of things.

10 GARTH ANDERSON: This is Garth Anderson.

11 If you look in the site management plan in  
12 Section 2, we kind of lay that out, the general time  
13 frame of when we're going to start looking at the  
14 GCWs in the interior of the plumes.

15 VIDEOGRAPHER: Garth, two minutes.

16 GARTH ANDERSON: We have two minutes until  
17 we need to do another tape change.

18 LYNN MOORER: Before I -- Lynn Moorer  
19 again.

20 Before I forget, I need to note for the  
21 record that the purported link on the web site for  
22 answers to the December 2005 questions is  
23 inoperable, it has never operated properly, so you  
24 have touted having provided answers and you're  
25 attempting to shift to electronic provision of

1 information, but it is spotty with respect to the  
2 technical link up.

3 I want to talk about the -- a little bit  
4 about your groundwater -- excuse me, containment  
5 evaluation report draft final dated June 2006.

6 Could you answer quickly for me what is  
7 the definition of containment that you have now  
8 finally provided?

9 DEQ did note that that draft version that  
10 we discussed at the last meeting did not contain a  
11 definition of containment, so what is your  
12 definition of containment now in this report?

13 JASON LEIBBERT: Very quickly before the  
14 tape runs out, definition of containment is every  
15 year we will demonstrate that the groundwater --  
16 that the contaminated groundwater is or is not being  
17 hydraulically captured, is not -- is or is not being  
18 captured by the extraction wells that we have, so  
19 that's the definition.

20 If we can show that, yes, all of the  
21 contaminated water that we know of is being captured  
22 by the extraction wells to everyone's satisfaction,  
23 the answer to that question is yes.

24 If we're not able to show that the  
25 contaminated groundwater is being captured by the

1 extraction wells, then the answer to that question  
2 is no, and that's it.

3 LYNN MOORER: And so your definition of  
4 containment or contamination extends further than  
5 just what are the cleanup goals?

6 JASON LEIBBERT: No, we're signed up to  
7 capture contaminated groundwater that exceeds the  
8 action levels that have been assigned to us.

9 GARTH ANDERSON: Okay. We'll have to do a  
10 tape change, so take a break, please.

11 (9:07 p.m. - Recess taken.)

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1                   (At 9:20 p.m., with parties present as  
2 before, the following proceedings were had, to-wit:)  
3                   GARTH ANDERSON: I think we're ready to  
4 start again. Are we live now?  
5                   VIDEOGRAPHER: We are.  
6                   GARTH ANDERSON: Okay, great.  
7                   LYNN MOORER: Mr. Anderson, Lynn Moorer.  
8                   GARTH ANDERSON: Jason.  
9                   LYNN MOORER: I was -- I wanted to  
10 continue my colloquy with Mr. Leibbert on  
11 containment.  
12                   GARTH ANDERSON: Just a minute, please.  
13                   Please, if anybody has any specific  
14 questions after the meeting, we'll be here to answer  
15 and to talk details on the map.  
16                   So, okay, I think we're once again live,  
17 so, Ms. Moorer, I believe you had a question.  
18                   LYNN MOORER: Mr. Leibbert, I want to get  
19 it clear for the record here, we're talking about  
20 the containment evaluation report --  
21                   Harold, you're too noisy.  
22                   When -- and you were making  
23 characterizations about the known extent of the  
24 contamination, what you really mean is contamination  
25 that is above the cleanup goals, that's what you

1 really mean; you don't mean all contamination, you  
2 just mean contamination that's above the cleanup  
3 goals, right?

4 JASON LEIBBERT: Yes, that's a  
5 clarification that I need to make, is that when we  
6 talk about containing contaminated groundwater,  
7 we're talking about containing contaminated  
8 groundwater at concentrations above the action  
9 levels that have been defined for the site.

10 LYNN MOORER: I want to direct you to the  
11 containment evaluation work plan dated June 20 --  
12 June 2006, Page 4.1.

13 And for those of you who are aware that --  
14 that the Corps came up with collaboration of EPA and  
15 DEQ, some responses to Senator Nelson, you may know  
16 that they came up with some answers to questions  
17 lodged to them by Senator -- or forwarded to them by  
18 Senator Nelson.

19 And one of things that they say in the  
20 response to Senator Nelson is that -- let me see,  
21 excuse me a moment, there's -- I need the Nelson  
22 letter.

23 Anyhow, they're basically saying that the  
24 site in this containment evaluation work plan as  
25 being -- as laying out what the response plans are

1 intended by the Corps, by DEQ and EPA if there are  
2 problems that arise; that's where you can find the  
3 response plans in relation to that.

4 Thank you, Melissa.

5 So Mr. Anderson's response to  
6 Senator Nelson dated June 15, 2006, says, the  
7 Kansas City District Corps of Engineers with the EPA  
8 and Nebraska Department of Environmental Quality are  
9 developing a response plan that the Corps would  
10 implement in the unlikely event the contaminated  
11 groundwater plume moves beyond the reach of the  
12 groundwater containment system now in place.

13 These response actions are described in a  
14 document entitled the containment evaluation work  
15 plan. Okay. I've got a copy of the containment  
16 evaluation work plan that says it's draft final  
17 June 2006.

18 So if you look in here in the section  
19 devoted to response plan -- and I have copies for  
20 other folks who want just the excerpt that I'm  
21 talking about, this is Section 4 out of the report.

22 It's -- it's all of two pages, the  
23 response plan is all of not even quite two pages, so  
24 if somebody else is interested in seeing those, feel  
25 free to help yourself.

1           So I'm directing your attention to a  
2   statement that you've got in here on Page -- on both  
3   Page 4.1 and 4.2. You talk about trend, a clear  
4   trend.

5           It says, if the results of the increased  
6   sampling frequency do not indicate that there is a  
7   clear trend in the results or if the original  
8   detection is not consistent or reproducible, then  
9   the sampling frequency shall be returned to the  
10  original frequency with no further action necessary.

11           So my specific question is what do you  
12  mean by clear trend? You also use that term on  
13  Page 4.2 also.

14           GARTH ANDERSON: Do you want to handle it?

15           JASON LEIBBERT: Uh-huh.

16           What this is meant to address is a case  
17  such as the case of MW-85.

18           If you recall, MW-85 is down here and it's  
19  down gradient of the extraction wells and down  
20  gradient of the contamination.

21           You can double-check me on the dates to  
22  make sure I'm correct, but what I remember is in  
23  December 2004 this well was sampled, and it had a  
24  detection of ten parts per billion of RDX,  
25  completely unheard of, had never been seen before at



1 that location at that kind of concentration, took  
2 everyone by surprise; that is clearly not where  
3 contamination is supposed to be.

4 The response -- part of the response to  
5 that was to sample that well again and to sample it  
6 on an increased frequency instead of just sampling  
7 that well once a year, to sample it three or four  
8 times a year.

9 Since then every time we've gone back to  
10 this well it's been either nondetect or below action  
11 level.

12 To follow up on that we did some -- a very  
13 small geoprobe investigation right in this vicinity  
14 to try to determine if there is any other  
15 contamination in the area that -- that wasn't  
16 revealed by sampling the monitoring well.

17 This area was also covered -- it's behind  
18 the screen now, but when we did those geoprobe  
19 transects in last year -- I know it's hard to see.

20 MW-85 is right here, there's a cluster of  
21 geoprobe points right, again to try to reconfirm  
22 that; all indications are is that there's no  
23 contamination or there's no contamination above the  
24 action level at that location, so this -- this  
25 statement in the containment evaluation work plan

1     that you just read is meant to address cases like  
2     that.

3                 There may be times in the future, five  
4     years, ten years from now, I don't know when, maybe  
5     we'll find a detection, we'll find a -- we'll sample  
6     a well out here and it'll be -- it'll have TCE above  
7     the action level, and if that happens, we want to  
8     confirm that, we want to sample that again as fast  
9     as we can to see if that's really correct.

10                LYNN MOORER:   Mr. --

11                JASON LEIBBERT:  We want to do more  
12     investigation in that area to make sure that that's  
13     actually correct because there's times when you get  
14     unusual or unreproducible results that would lead  
15     you to a false conclusion, and you need to be able  
16     to rule those out.

17                LYNN MOORER:  Mr. Leibbert, may I focus  
18     you, I'm asking a basically short question or a --  
19     something with a short answer, what constitutes a  
20     clear trend.

21                So for example, would it take two or three  
22     or four occasions in which you see similar or rising  
23     readings, what constitutes a clear trend?

24                Or how many -- you've given two possible  
25     definitions here but you haven't specified, you've

1 also indicated there could be other locations in  
2 that vicinity that might indicate a trend, but how  
3 many constitute a trend; that's what I'm saying,  
4 define for me what you consider to be a clear trend?

5 JASON LEIBBERT: Well, there is no  
6 specific answer to that question. I can --

7 LYNN MOORER: Well, then why do you use  
8 this in the report? I mean, this seems to be clear,  
9 important language. I mean, this is your response  
10 plan; you say if there is a clear trend then you  
11 will do thus and such.

12 Well, if you can't explain what a clear  
13 trend is then this is a pretty worthless plan as it  
14 pertains to use of that term.

15 JASON LEIBBERT: Well, a clear trend would  
16 be results that would be reproducible over time,  
17 that we would see this unusual result and that would  
18 trigger our attention.

19 LYNN MOORER: Over how much time?

20 JASON LEIBBERT: Kind of depends. If it's  
21 in an area that's very near a residential well, we  
22 would probably not wait very long; if it's in a  
23 different area that poses little or no risk, we will  
24 probably wait two or three or four quarters in a  
25 row.

1           Some of these things are affected by  
2   seasonal variations, so we have to be able to rule  
3   that out; again some of these things are ruled by  
4   inaccurate results, so you have to be able to rule  
5   that out.

6           You know, you can't make a snap decision  
7   just based on one result one time. You have to be  
8   able to reproduce that result over and over again  
9   before deciding to take action on it; that's the  
10   intent, that's what this plan is trying to lay out.

11           LYNN MOORER: Okay. So Mr. Leibbert, you  
12   just said in order for you to take action you've got  
13   to see the result occurring over and over and over  
14   again; that certainly seems to imply that this plan  
15   doesn't anticipate any sort of quick preparedness or  
16   ability to respond quickly to some sort of an  
17   emergency situation.

18           You're saying you're going to have to see  
19   this -- the result happening over and over and over  
20   again before you do anything about it; I would say  
21   that's a pretty poor plan, and I think most folks  
22   here would agree with me.

23           You understand, folks, this is just a  
24   two-page response plan is all they've come up with,  
25   and they've told us now he's got to see this

1   happening over and over and over again before  
2   they're going to take any response, and this is MUD  
3   starting to pump.

4               One last question related to that.

5               The last sentence of this says, any --  
6   this is when you finally get to the tier that says  
7   when you take action. The first, they have to  
8   confirm the results, and keep confirming and  
9   confirming and confirming, and then the next tier is  
10  they investigate, finally the third tier is taking  
11  action.

12              And then they conclude and say any such  
13  action would be developed according to the routine  
14  and appropriate design process, and would also be  
15  developed in conjunction with the appropriate  
16  regulatory agencies.

17              I'd like you to explain to me,  
18  Mr. Leibbert, or somebody else from the Corps, what  
19  does it mean that an action would be developed  
20  according to the routine and appropriate design  
21  process?

22              JASON LEIBBERT: So if you're familiar  
23  with this site you may be familiar with the detail  
24  that the site is regulated by CERCLA, which is a  
25  series of environmental laws that dictate how and

1     why and when you cleanup sites like this.

2                 CERCLA has a very clear process on how you  
3     go about defining a remedy, how you go about  
4     selecting a remedy, and prior to that, how you go  
5     about investigating a site.

6                 The CERCLA process is basically you  
7     investigate to determine the problem, you design a  
8     remedy that is meant to address the problem, and  
9     then you go out and implement that remedy.

10                That process is clearly defined, and  
11    that's what this sentence is referring to when it  
12    talks about the routine and appropriate design  
13    process.

14                We can clarify that if it needs  
15    clarification, but between us and EPA and DEQ, we  
16    know what that process is, and that process is just  
17    as I explained; you evaluate the problem, you work  
18    together to determine a solution, and then the  
19    responsible party implements that solution.

20                LYNN MOORER:  Well, thank you for your  
21    response, Mr. Leibbert, but I do not agree with your  
22    implication that, well, if DEQ, EPA and the Corps  
23    know what we need therefore our reports don't have  
24    to be clearly written, nor does the public have to  
25    be clued in on what our grand plan is, I reject

1     that.

2                   Is it fair to say that from your view,  
3     routine and appropriate design process means the  
4     CERCLA process?

5                   JASON LEIBBERT:  Yeah, everything we do at  
6     the site is governed by the CERCLA.

7                   LYNN MOORER:  I simply want to know does  
8     routine and appropriate design mean in your view the  
9     CERCLA process, is that what that is intended to  
10    convey?

11                   GARTH ANDERSON:  Well, this is Garth  
12    Anderson.

13                   What it's intended to convey is that it's  
14    a -- you don't rush out there and throw a remedy in  
15    without giving it some type of deliberate design  
16    process, where we -- you try to find -- you come up  
17    with the best remedy for the situation and you  
18    design appropriately, taking into account all the  
19    data, geology, all the right technology, and once  
20    that's designed it has to be reviewed and concurred  
21    with the regulatory agencies; that is what we mean  
22    by the routine design process.

23                   LYNN MOORER:  Where does this report, if  
24    any -- where in this report, if anywhere in it, does  
25    it deal with your preparedness for situations that

1 are not routine?

2 JASON LEIBBERT: Well, that's exactly what  
3 this report speaks to is if and when there's a time  
4 when there's a detection of contamination above the  
5 defined action levels in an area outside of the  
6 known extent of contamination, basically what that means  
7 is if we see contamination somewhere where it's not  
8 supposed to be, that's the trigger.

9 LYNN MOORER: That's pretty routine at  
10 this site.

11 JASON LEIBBERT: It is very routine,  
12 that's the appropriate response.

13 LYNN MOORER: The question is your  
14 preparedness for things that not routine,  
15 Mr. Leibbert, things that are unusual, surprises.

16 GARTH ANDERSON: Well, this is  
17 Garth Anderson.

18 LYNN MOORER: My question has to do with  
19 things that suddenly are of a higher urgency than  
20 you've ever dealt with before; where is your plan  
21 that describes how you're going to deal with that?

22 GARTH ANDERSON: That's what this is, by  
23 finding contamination outside of the known or  
24 expected to be, that is not routine. That's an  
25 unusual occurrence, and this is the response action



1     that we would take if something were to be found out  
2     of -- out of what we're signed up to do according to  
3     the ROD, according to the way our system operates.

4             If there's an emergency situation like  
5     such as a residential well is found to be  
6     contaminated above the action level, then we  
7     immediately, without consultation with the  
8     regulators, without anybody giving any blessing, we  
9     put in an alternate water supply, some type of  
10    bottled water or home treatment system.

11            LYNN MOORER:  Are you prepared to provide  
12    an alternate water supply to the city of Lincoln?

13            GARTH ANDERSON:  That's a huge  
14    hypothetical question that I'm not going to address  
15    tonight.

16            LYNN MOORER:  Well, it's certainly a  
17    possibility, and that is one of the attributes I  
18    think of a competent response plan or a contingency  
19    plan.

20            GARTH ANDERSON:  We're not -- the  
21    contingency plan is not going to do every what-if  
22    that you could possibly imagine on the site.

23            When we see things that are out of the  
24    ordinary, then we look at it to make sure that we  
25    understand the problem, we know the extent of the

1 problem, and we -- if necessary, we implement an  
2 appropriate remedy.

3 LYNN MOORER: Okay. You've dodged that  
4 question.

5 I want to ask you about Figure 1.3 in this  
6 report. It's entitled extraction well system target  
7 capture zone, and on the western part of this site  
8 it shows as the extended plume down on Load Line 1,  
9 this little orange extent of the plume as the legion  
10 describes it to be, but I noticed that the dashed  
11 lines, which are supposed to be the target capture  
12 zone, don't go as far south as the plume extends, so  
13 that at least indicates to me that your target  
14 capture zone is not as far south as the plume is  
15 known to extend at this time.

16 So can you explain to me why the target  
17 capture zone is not as far as the plume?

18 JASON LEIBBERT: It -- that's -- that's  
19 kind of an error on that figure.

20 The intent is to capture all contaminated  
21 groundwater at levels above the clean-up goals for this  
22 site.

23 Our determination on how well we're doing  
24 that down here around Load Line 1 is in progress  
25 this year and will be documented next year as part

1 of the annual remedy performance report as we talked  
2 about in response to Harold's question.

3 All indications are is that EW-12 is doing  
4 a good job all by itself and may be capable of  
5 capturing all this contamination all by itself.

6 LYNN MOORER: Mr. Leibbert, before you  
7 keep going on, I'm just -- is the short answer to  
8 the question it was a mistake and that you do plan  
9 to try to include the entire extent of the plume  
10 within your target capture zone?

11 JASON LEIBBERT: Yes.

12 LYNN MOORER: You could have saved us time  
13 by just saying that. Okay. Thank you.

14 DAVE MCREYNOLDS: We've talked about  
15 85 down here, and, you know, when you're discussing  
16 it, it came out five times the limit when it came on  
17 the map, and there's a couple residential places  
18 there, 32 and 34, real close, and then it's been up  
19 the road there on County Road 52A for -- I've looked  
20 it up in the library for 13 years, probably longer,  
21 and they've been from five to eight, they've been  
22 over the limit all that time, and it probably is  
23 today, it could be ten.

24 So, you know, it's in that area, and you  
25 say nondetect, well, it's never been nondetect after

1   you found it. Maybe it's been a lower level, but  
2   you're finding it at two levels at 85, and you never  
3   say that unless we ask you, and you say, yeah, it's  
4   at two levels, the monitoring well at 85.

5               It's never completely gone away, has it?

6               JASON LEIBBERT: Well, it's below the safe  
7   drinking water level.

8               DAVE MCREYNOLDS: Yeah, but it wasn't at  
9   one time, it was five times the limit.

10              JASON LEIBBERT: Well, that result has  
11   never been reproduced.

12              DAVE MCREYNOLDS: True.

13              JASON LEIBBERT: We went back to that same  
14   location.

15              DAVE MCREYNOLDS: Where did it go, it  
16   could have went farther south?

17              JASON LEIBBERT: These wells get sampled,  
18   32 and 34, the two residential wells that you  
19   pointed out, that have been sampled --

20              DAVE MCREYNOLDS: Yeah.

21              JASON LEIBBERT: -- and --

22              DAVE MCREYNOLDS: But did it go east, did  
23   it go straight east? We know it's north, it's all  
24   the way north for a long way, RDX.

25              JASON LEIBBERT: These results are to the

1 west, to the north, to the east and the south of  
2 MW-85.

3 DAVE MCREYNOLDS: You haven't found it at  
4 any level?

5 JASON LEIBBERT: Well, I'm not going to  
6 say not at any level, I'm going to say below the  
7 site cleanup level, which is the same as the safe  
8 drinking water level.

9 SCOTT MARQUESS: (Inaudible comment.)

10 JASON LEIBBERT: Below the action level.

11 DAVE MCREYNOLDS: So you're telling us  
12 right now, Scott, that there's no worry?

13 SCOTT MARQUESS: I'm telling you that the  
14 safe drinking water level, the level that's safe to  
15 drink, is two and below.

16 DAVE MCREYNOLDS: Okay. Scott, while  
17 you're on this, why did that show up five times the  
18 level one time, and how come it's at two levels  
19 where it didn't use to be at two levels?

20 SCOTT MARQUESS: I'm not sure I can  
21 address -- I can't tell you why it showed up at ten,  
22 I don't have an explanation. Possible explanations  
23 could be laboratory or sampling artifacts, error,  
24 lab error, the sampling cross-contamination. That'd  
25 still be speculative, but I don't have an answer.

1                   DAVE MCREYNOLDS: It's a bigger concern  
2   that it's at two levels rather than one even though  
3   it's below the action level?

4                   SCOTT MARQUESS: I'm sorry, I'm not  
5   following your question.

6                   GARTH ANDERSON: It think it's two depths.

7                   DAVE MCREYNOLDS: Yeah, two depths at 85.

8                   SCOTT MARQUESS: Two depths, yeah.

9                   DAVE MCREYNOLDS: When you first found it  
10   it was only at one depth, now it's at two different  
11   depths.

12                  SCOTT MARQUESS: I'm sorry, Dave.

13                  DAVE MCREYNOLDS: But it's below the  
14   action level but it's there.

15                  SCOTT MARQUESS: Right, both are below two.

16                  DAVE MCREYNOLDS: Right, but, you know,  
17   when it's there, it's not like it's non-detectible,  
18   period.

19                  SCOTT MARQUESS: That's correct, that's  
20   correct.

21                  DAVE MCREYNOLDS: Okay. Thank you.

22                  LORUS LUETKENHAUS: I noticed there wasn't  
23   a very big crowd here this evening, was this RAB  
24   meeting notified in the paper? Was a notice put in  
25   the papers, local papers?

1           TOM O'HARA: These were sent out to all  
2 the news wires notifying this meeting last week.

3           LORUS LUETKENHAUS: On 6.1, your mission  
4 statement, this is for the RAB, the RAB at a minimum  
5 will announce the meetings at appropriate local  
6 media, including the broadcast media well in  
7 advance.

8           Now, this week is not well in advance,  
9 just a point of information, all right, it should  
10 have been in there two weeks ago or at least a week  
11 ago, at the least a week ago so that people can plan  
12 for it, because I think that's probably why there  
13 weren't many people here although the rainstorm  
14 didn't help.

15           I've got a couple more.

16           Platte River is as low as I've seen it in  
17 40 years right now. This rain might bring it up a  
18 little bit, otherwise I look in about three weeks  
19 it's going to be dry, okay.

20           You're going to run an updated groundwater  
21 model, in September it'll be completed, right?

22           JASON LEIBBERT: (Nods head.)

23           LORUS LUETKENHAUS: Okay. Our next RAB  
24 meeting is October 19th, can we have a drawdown map  
25 of MUD pumping 104 million gallons a day when the

1 Platte runs dry, 30 days after it runs dry, and  
2 60 days after it runs dry?

3 Can't do that because it'll look so bad  
4 after last night, the junk that's in the university  
5 there, that drawdown map is going to go clear  
6 through that university site where all that let's  
7 just call it bad stuff is, and we don't want the  
8 public to know about that, correct?

9 JASON LEIBBERT: Well, what I'll say is by  
10 the next RAB meeting we're not going to have a  
11 drawdown map that shows MUD pumping at 104 million  
12 gallons a day and the Platte River going dry; that's  
13 not the intent, that's not what our model is meant  
14 to do.

15 Our model is to help us manage this site,  
16 and our focus is on the remediation, the cleanup of  
17 this site, and that's what our model is meant to do.  
18 It's meant to help us do that.

19 The model includes the Platte West Well  
20 Field and it includes the Platte River because those  
21 are the features that are hydraulically important,  
22 you have to include those whenever you talk about  
23 this site.

24 But I'm not going to make the model pump  
25 the Platte River dry, I can get that, but it'd be



1 completely false, but I'm not going to do that. I'm  
2 not going to make my model do something that's not  
3 appropriate.

4 LORUS LUETKENHAUS: I wouldn't say it's  
5 not appropriate, I would say it hasn't happened yet,  
6 but we need to know what's going to happen.

7 See, MUD certainly isn't going to do it,  
8 and you're supposed to be looking out for our health  
9 and welfare and our well-being, and you're not doing  
10 it because you won't give us a drawdown map that  
11 shows just how bad it's going to be.

12 Now we've Carbon 14, chloroform -- I don't  
13 know where I had it. There's about -- you got led  
14 at 300 percent over maximum limit.

15 Now, I know it's on the university, but  
16 when the MUD starts pumping that is going to affect  
17 this confounded eastern edge -- and just a minute,  
18 Rodney, you can -- or Scott, you can go to it.

19 Now, on your RAB meeting record from May  
20 2004, Mr. Schwartz said MUD will install monitoring  
21 wells on the eastern portion of the site to monitor  
22 contaminants.

23 Now, I would certainly suggest that you  
24 put them in really close to that dam there because  
25 there's a bunch of bad stuff there.

1           SCOTT MARQUESS: Lorus, the findings of  
2   the university, that's information we've had for  
3   about a week now, so it's the first shot. Some of  
4   that data we question, some of it we have some  
5   understanding of, all of it we have to evaluate  
6   further and are planning to do so.

7           So to go beyond that and to say it is or  
8   isn't an issue relative to MUD, I mean we're way,  
9   way early in the game with the university at this  
10  point.

11           It's not -- the issue with the university  
12  really isn't any different than the broader issue  
13  with the site in terms of any MUD impact, the  
14  university contaminants; I mean, we wouldn't  
15  anticipate that they would extend beyond the extent  
16  that we've already depicted here for TCE.

17           So in terms of the global picture, it's  
18  not really any different. It's different  
19  contaminants, but not a different extent that would  
20  be reached by anything hypothetically that MUD might  
21  do.

22           LORUS LUETKENHAUS: Except for the  
23  drawdown at 104 million gallons a day, which they  
24  can pump legally, that nobody wants to provide a map  
25  for.

1               SCOTT MARQUESS: Well, I think MUD runs  
2 that scenario.

3               LORUS LUETKENHAUS: We've never seen it,  
4 I'd like to see that at the next RAB meeting.

5               SCOTT MARQUESS: Well, just -- I'm pretty  
6 sure it's in there, and I know that their model is  
7 on their web site, but --

8               LYNN MOORER: He's talking about the dry  
9 conditions.

10              SCOTT MARQUESS: Okay. 104 plus dry,  
11 okay, I don't know about that one.

12              LYNN MOORER: They haven't done that.

13              LORUS LUETKENHAUS: They won't because  
14 it's going to look so horrible.

15              SCOTT MARQUESS: Well, I think at 104 is  
16 where they said it started to bust.

17              LORUS LUETKENHAUS: No, 72 -- or 78, I'm  
18 sorry, 78 it busts, so naturally they're not going  
19 to want to show us what happens at 104 million  
20 gallons a day especially when the Platte River is  
21 dry or they've pumped it dry.

22              They probably won't -- if this drought  
23 doesn't break next year they won't have to pump it  
24 dry, it'll be dry. It'll be known as the  
25 Platte Forest because there's a lot of trees growing

1 up in the islands right now.

2 But anyway, see, you guys are just --  
3 you're giving us the runaround. We've been asking  
4 for this and asking for this, and there's no, we  
5 can't do it, we can't do it, and you tell us you  
6 have all these experts working for you, and you say  
7 it doesn't affect your model, but it does.

8 JASON LEIBBERT: Well, I'm not sure  
9 exactly where you're getting at, Lorus. It -- it's  
10 important for us -- us to include the Platte West  
11 Well Field in our model, and we have done that and  
12 we'll continue to do that.

13 LORUS LUETKENHAUS: You're only going to  
14 use part of their model or part of what they're  
15 doing.

16 JASON LEIBBERT: No.

17 LORUS LUETKENHAUS: Yes, you are. If  
18 you're going to use everything they're doing, you  
19 would say certainly we'll get you a map next RAB  
20 meeting at 104 million gallons a day under those  
21 conditions, because that's what's going to happen,  
22 they're legally permitted to pump that.

23 DAVE MCREYNOLDS: And they're here in the  
24 summer every day and it's dry.

25 LORUS LUETKENHAUS: There's an awful,

1    awful resistance on your part, on everybody's part.  
2    MUD won't do and you guys won't do it, and I  
3    question why when you're supposed to be looking out  
4    for us.

5               And if you run a model, it can't be that  
6    much more difficult to throw in a couple parameters  
7    and change a couple things like you were talking  
8    about and run a model and bring us a map and let's  
9    see what it looks like.

10              JASON LEIBBERT:  Well, it -- if you have  
11    questions about the MUD model you need to direct  
12    those to them.

13              LORUS LUETKENHAUS:  Don't give me that.

14              DAVE MCREYNOLDS:  We're all in this, EPA  
15    and all of you; you've got to take all of the  
16    scenarios and put them in there because it can  
17    happen.

18              What do you think, Larry?  I mean, when  
19    they start pumping 104 do you want to say something  
20    to this, Larry, what's going to happen?

21              LARRY ANGLE:  Larry Angle, Lower Platte  
22    North.

23              Their annual average is supposed to be 52.

24              DAVE MCREYNOLDS:  Yeah, they're going to  
25    be pumping in the summer.

1           LARRY ANGLE: Yeah, I understand that,  
2   there's irrigation wells, et cetera, and that's one  
3   of my concerns is again low flow and what's going to  
4   happen at that condition.

5           I wish I knew more about modeling, but  
6   they always say you should use like an annual  
7   average kind of thing, but I'm more concerned about  
8   with the transient conditions, and so I don't know,  
9   that's a very good question and I wish I could  
10   answer that.

11          LYNN MOORER: I noticed that Mr. Marquess  
12   did do one good thing in asking MUD to calibrate its  
13   next model using August data.

14          What month of data will the Corps use in  
15   calibrating its next RDGM?

16          JASON LEIBBERT: We've had that  
17   conversation amongst ourselves as well, and --

18          LYNN MOORER: You can give a short answer.

19          JASON LEIBBERT: Well, I think I'm going  
20   to answer the question the way I feel is  
21   appropriate.

22          We've looked at that ourselves, and we're  
23   going to try to do two different calibration  
24   targets: We're going to try to do a calibration  
25   target in the spring and a calibration target in the

1 fall.

2 LYNN MOORER: Which months? What do you  
3 consider spring, what month for spring and what  
4 month for fall?

5 JASON LEIBBERT: The spring coordinated  
6 event is usually in March, and August is -- you  
7 know, I'll just say that exactly what month is less  
8 important than trying to get something that's  
9 representative of the whole irrigation season.

10 So if August is the best month, if August  
11 is the most representative of the irrigation season  
12 that's what we'll use. If it's not August, if it's  
13 something else, then we'll use that instead.

14 LYNN MOORER: So you don't, at this point,  
15 know, have a very good idea of what that time period  
16 is for irrigation season, you don't know that yet?

17 JASON LEIBBERT: I can't tell you that,  
18 but I can take this --

19 LYNN MOORER: Ask anybody else around here  
20 and we'll all tell you. We know it's August, that's  
21 the month.

22 JASON LEIBBERT: Okay.

23 LYNN MOORER: No question, that's where  
24 you got the largest drawdown.

25 JASON LEIBBERT: If you say so.

1                   DAVE MCREYNOLDS: Look at the records.

2                   LYNN MOORER: Ask Dave, Harold will tell  
3 you, Lorus will tell you.

4                   I had one other note for the record.

5                   During the break I wanted -- I made this  
6 comment to Mr. Leibbert, but I want it to go on the  
7 record, and this falls on what Lorus was asking for,  
8 the map.

9                   I asked why this big map that you've got  
10 on the north wall is an outdated map. I -- and I  
11 respectfully request that the maps that you bring us  
12 be current maps.

13                   There's -- it's worthless or virtually  
14 worthless to be giving us presentations on maps that  
15 are outdated.

16                   I did note that the more of an aerial  
17 photo type map that's in the containment evaluation  
18 report is a good one, and I'm suggesting -- I  
19 suggested and requested, I want this to be on the  
20 record so you will at a minimum have a record of  
21 this in case you should actually look at the  
22 transcripts, that that is a good layout, and if you  
23 could thicken the lines, the colored lines that show  
24 the extent of the plume, that is one of the better  
25 visual layouts, and I request that an updated



1 version of that map be used at the next RAB meeting,  
2 and don't use outdated maps, please.

3 JASON LEIBBERT: I'll go on record by  
4 saying thanks for that suggestion. I'll also go on  
5 record by saying that this map is convenient to  
6 speak from because it's so large and everyone can  
7 see it.

8 We do provide updated maps every RAB.  
9 Those are updated, those are updated, everything we  
10 put in the reports and put in the library is  
11 updated.

12 This one isn't changed from month to month  
13 because it's not necessary to, because we publish  
14 updated results in other forms.

15 LYNN MOORER: I disagree with you,  
16 Mr. Leibbert. It is misleading to be posting an  
17 outdated map at a meeting and then referring to it  
18 continually as you have. Don't bring us maps that  
19 are outdated.

20 JASON LEIBBERT: Well, I refer to these  
21 maps many times during the evening, and those are up  
22 to date.

23 LYNN MOORER: Don't bring us outdated  
24 maps, that's the point.

25 MELISSA KONECKY: I'm Melissa Konecky.

1           You guys sampled four residential wells  
2   then since the last RAB; is that right?

3           JASON LEIBBERT:   (Nods head.)

4           MELISSA KONECKY:   Were they new wells that  
5   hadn't been tested before, or why were there just  
6   four?

7           BRADDEN BIGELOW:   (Inaudible comment.)

8           JASON LEIBBERT:   The sample schedule is  
9   different for every well.   Four were sampled in  
10   the -- you were talking about the June sampling  
11   event, that's what was scheduled.

12           They're not new or unusual, they're four  
13   wells that have been sampled again in the past or  
14   have been sampled previously in the past.

15           Next quarter we'll do a different set of  
16   wells, the quarter after that we'll do a different  
17   set of wells, the quarter after that we'll do a  
18   different set of wells.

19           The four wells that were sampled in June,  
20   that was part of the regular schedule, and there's  
21   nothing unusual about that.

22           MELISSA KONECKY:   Is it the ones that are  
23   closer to the plumes, you sample more frequently  
24   then or --

25           BRADDEN BIGELOW:   They're in the plume.

1                   JASON LEIBBERT: Well, Brady can look it  
2 up and tell us exactly which four wells we're  
3 talking about. I believe it's some of these that  
4 are in the plume.

5                   And Brady, if you can look what's the  
6 frequency that we do those wells.

7                   BRADDEN BIGELOW: Okay.

8                   JASON LEIBBERT: The four that we're  
9 talking about.

10                  BRADDEN BIGELOW: Those are quarterly, I  
11 believe those are the ones that -- I'll run it.

12                  JASON LEIBBERT: Brady's going to check,  
13 but I think it's these that are in the plume, and  
14 these are on a quarterly frequency, so these get  
15 sampled every three months, but we'll wait to see if  
16 that's an accurate response.

17                  LYNN MOORER: I wanted to get a specific  
18 commitment from Mr. Anderson.

19                  When are you going to provide the complete  
20 site management plan in large print including the  
21 schedule as you've promised? When specifically are  
22 you going to provide it?

23                  GARTH ANDERSON: Well, we can -- it's just  
24 a matter of how we print it. If this is something  
25 that we want to discuss at the next RAB, we can do

1     that, or if certain individuals would like us to  
2     mail them a hard copy on something larger, we can do  
3     that too.

4             Just by putting it on the web doesn't  
5     necessarily mean it's in a bigger font or anything;  
6     it has to be printed out in hard copy and  
7     distributed.

8             So would you like us to mail -- mail them  
9     to certain individuals or whoever requests it or --

10            LYNN MOORER: I'd like to clarify. I'm  
11     not suggesting that an electronic version of this is  
12     okay, we're talking about hard copy here.

13            GARTH ANDERSON: That's -- I don't  
14     disagree.

15            LYNN MOORER: Hard copy, large print; you  
16     promised it -- that you would provide it, and that  
17     we would talk -- have these available at this  
18     meeting, and so you didn't.

19            At a minimum, what my request is, is that  
20     you provide a large copy to anybody who -- and mail  
21     it to them within a week of this meeting in large  
22     print for anybody who requests it, and I'm one who  
23     is requesting it.

24            Anybody else want it mailed to them within  
25     a week?

1                   Okay. And then have copies of whatever  
2 the current one is at the next RAB meeting in large  
3 print.

4                   GARTH ANDERSON: Well, if I could -- if we  
5 could get -- maybe Tom can get the list of those  
6 that would like a copy mailed to them, and I don't  
7 know if we have your mailing address, Ms. Moorer.

8                   LYNN MOORER: I sign up every time and you  
9 never send me anything. That also was another,  
10 shall we say, myth that you purvey at every meeting.

11                   You say all you have to do is sign up and  
12 we'll send you these notices. You've never sent me  
13 a notice once, you've never mailed me anything  
14 either electronically or hard copy, so let's get  
15 honest about this. I sign up every time and you  
16 never send me anything.

17                   GARTH ANDERSON: Okay. Tom O'Hara will  
18 get a list of those that would like a hard copy in  
19 the large font, and we'll mail them out when we get  
20 back to the office.

21                   DAVE MCREYNOLDS: Thank you. I sign up  
22 every time and don't get anything either.

23                   I want to clarify on the residents that's  
24 turned in. There was 25 different people that  
25 turned in, and as far as I know, none of them have

1    been checked, and all of them were within a mile and  
2    a half to two miles.

3                You know, County Road 6 and all that area  
4    across the bottom, and it was told to me about ten  
5    months ago, we didn't have enough monitoring wells  
6    over there on the west side, it slipped through, so  
7    this could slip through, and so some of these --

8                It'd be nice if some of those 25 were  
9    checked because it could slip through and be at them  
10   today, and it's going to be around 50 to a hundred  
11   more years, and it's going to slip through if you  
12   guys don't work harder, and it'd sure be nice to  
13   check some of the residential, and they're real  
14   close. Some of them are a mile and a half.

15               You know, here's the list, you put it out;  
16   you just check that list and see if they aren't  
17   within a mile and a half to two miles, and I need  
18   that back. You said that, you brought it here and  
19   put it out. All these people request it, you know.

20               JASON LEIBBERT: (Inaudible comment.)

21               DAVE MCREYNOLDS: Yes, I picked it up  
22   here, I didn't make it up. Right there it tells,  
23   Bigelow got the information, it's all on his. There  
24   was another sheet too like that, a little bit  
25   different. All those people requested it.

1           JASON LEIBBERT: We'll take it and we'll  
2 double-check, and if they're within the mile --

3           LYNN MOORER: We can't hear you.

4           GARTH ANDERSON: You need to say it again.

5           DAVE MCREYNOLDS: Now, did you -- did you  
6 put that out and give it us to here? I picked it up  
7 here at the meeting, a RAB meeting, right?

8           JASON LEIBBERT: Dave, I'll tell you, that  
9 list is not familiar to me, and I don't know if that  
10 was something that was produced by the Army Corps of  
11 Engineers, but we'll take that list and we'll look  
12 at each one of those locations and we'll verify  
13 whether they're in or out of the one-mile zone, and  
14 if they're in we'll include them in the sampling  
15 from now on, and if they're out we'll keep it --

16           DAVE MCREYNOLDS: We don't know though  
17 that they are out. Probably all you have there is  
18 what's above the limit, and we know that it's  
19 farther south and farther east. All you got is the  
20 limit there.

21           GARTH ANDERSON: This was a -- this was  
22 something that was developed over a year ago, and it  
23 seemed to be fairly acceptable that we go out to  
24 this one-mile buffer zone from the known edge of the  
25 regulatory limit.

1                   This seemed to -- everyone seemed to agree  
2   this was a good thing, and we've been diligently  
3   sampling everything within that one-mile buffer  
4   zone.

5                   DAVE MCREYNOLDS: Did you hear what I said  
6   at the start though, and, Lisa was the person that  
7   told me ten months or twelve months, it slipped by  
8   us over here, we didn't have enough monitoring wells  
9   over here. Look how far south that went before you  
10  finally got on it to the west.

11                  JASON LEIBBERT: Load Line 1.

12                  GARTH ANDERSON: Right, yeah.

13                  DAVE MCREYNOLDS: So it can happen over  
14  here, it could slip there in some residential.  
15  There's a lot of houses around there if you'll check  
16  the maps.

17                  GARTH ANDERSON: And --

18                  DAVE MCREYNOLDS: I got maps right here to  
19  show you.

20                  GARTH ANDERSON: You also recall that we  
21  are -- we do have monitoring wells along the south  
22  here, and we're planning on putting more wells along  
23  the southern perimeter to make sure that doesn't  
24  slip through.

25                  DAVE MCREYNOLDS: Good.



1                   GARTH ANDERSON: Any last questions?

2                   VIC HUMLICEK: My name is Vic Humlicek  
3                   (phonetic).

4                   I just wonder how come you can't use  
5                   domestic wells for monitoring?

6                   JASON LEIBBERT: We do sample all of these  
7                   domestic wells. All of these green locations are  
8                   domestic wells, those are private residents, and we  
9                   do those either once or twice a year depending on  
10                  how they close they are to the plume.

11                  LYNN MOORER: We can't hear you, it's not  
12                  functioning.

13                  JASON LEIBBERT: In responding to Victor's  
14                  question, all of these green wells are residential  
15                  wells, and they're sampled either once or twice a  
16                  year depending on how close they are to the extent  
17                  of contamination.

18                  So that's important for us, we want to be  
19                  able to confirm that no one's residential well has  
20                  been contaminated above the safe water levels, but  
21                  it also helps us understand where the plume may be  
22                  moving, so we do use that information, we do sample  
23                  all those wells.

24                  GARTH ANDERSON: Okay. One more question  
25                  in the back.

1                   LYNN MOORER: I have at least two  
2 questions.

3                   The first one is will you get the meeting  
4 transcripts on the web site no later than 45 days  
5 after each RAB meeting? Specifically asking that --  
6 I'm asking that you do that so that it's not being  
7 provided roughly a week or ten days prior to each of  
8 the next RAB meetings, as has been your practice.

9                   That's very late provision of those  
10 transcripts, and last month -- last meeting you told  
11 us basically said, well, you can expect them within  
12 30 days, roughly a month or so after the RAB  
13 meeting, and you -- it took virtually two and a half  
14 months before you provided them.

15                  GARTH ANDERSON: What kind of turnaround  
16 do we think on this particular one?

17                  COURT REPORTER: That was my fault; I'll  
18 have them to you in two weeks.

19                  GARTH ANDERSON: We'll have the raw  
20 transcript in probably about two weeks, but we go  
21 through the transcript to correct any technical  
22 errors, make sure the right technical phrase or word  
23 is in there, and spellings are corrected and things  
24 like that, and that takes us probably another two  
25 weeks, so our goal will be get them up on the web

1 site within 30 days.

2 LYNN MOORER: All right. We'll hold you  
3 to it.

4 Then my basically last question is are  
5 you -- what are you -- the university -- excuse me.

6 What are your plans with respect to  
7 coordinating with General Dynamic and Dow Chemical  
8 in terms of their sampling and analysis for TCE on  
9 the site?

10 GARTH ANDERSON: I'm not really going to  
11 go into discussions with other -- that regard other  
12 PRPs at the site, those are potentially responsible  
13 parties.

14 LYNN MOORER: Well, a question is are your  
15 activities -- are your plans taking into account,  
16 recognizing that there may be activities by other  
17 PRPs at the site at -- apparently as it relates to  
18 TCE?

19 We've been talking about site management  
20 plan here, so that's a basic question that you can  
21 answer.

22 Are you taking into account or factoring  
23 in other activities that they may be taking with  
24 respect to the site? I'm referring specifically to  
25 a January 27, 2006, report prepared by Brown and

1 Caldwell --

2 GARTH ANDERSON: No.

3 LYNN MOORER: -- on behalf of Dow

4 Chemical and General Dynamic.

5 GARTH ANDERSON: No.

6 LYNN MOORER: You're not taking any of

7 their potential actions into account?

8 GARTH ANDERSON: No.

9 LYNN MOORER: Do you anticipate doing that

10 at some point in the future if an agreement is

11 signed?

12 SCOTT MARQUESS: Let me just step in I

13 guess.

14 The site management plan assumes the Corps

15 is going to take care of all the response actions,

16 TCE, RDX, the whole nine yards for OU2 groundwater,

17 so to the extent any additional -- they can get

18 additional contribution from another party, the work

19 that's been looked at thus far is very limited in

20 scope, so it'd be the first of -- hopefully the

21 first of a more substantial involvement on their

22 part, so -- but the site management plan has the

23 Corps doing all the work at this point.

24 LYNN MOORER: So it'd be fair to say it's

25 envisioned only that you'd be going after -- going

1 after these two other PRPs for contributions?

2 SCOTT MARQUESS: I don't think we could  
3 characterize it in that fashion, no. I believe it  
4 would be their intent to do work.

5 LYNN MOORER: All right. Well, okay,  
6 that's a little different from what you just said at  
7 the beginning.

8 SCOTT MARQUESS: I don't believe it is.

9 LYNN MOORER: All right. Anyhow just to  
10 clarify then, you're -- EPA anticipates that if an  
11 agreement is signed with other PRPs it would involve  
12 more than just contribution; it would involve actual  
13 work cleanup at the site?

14 SCOTT MARQUESS: At this point it's only  
15 investigatory in nature. We would envision that in  
16 the future it could very likely go beyond that in terms  
17 of their level of involvement, in terms of work,  
18 yes.

19 But since that hasn't been scoped out yet,  
20 that's why the Corps is still planning to go with  
21 the whole -- taking care of the entirety of the  
22 problem.

23 LYNN MOORER: So what are these PRPs --  
24 what are General Dynamic and Dow Chemical looking  
25 at, what's their specific focus right now?

1           SCOTT MARQUESS: And you see in the work  
2 plan, its limited scope, at this point looking at  
3 evaluating the potential for dense non-aqueous phase  
4 liquids in the groundwater on the --

5           LYNN MOORER: Load Line 1.

6           SCOTT MARQUESS: Yes, we won't say east  
7 and west because that's confusing for some.

8           LYNN MOORER: But basically just all  
9 around Load Line 1?

10          SCOTT MARQUESS: Well, it will be TCE in  
11 general ultimately, but they're starting at  
12 Load Line one.

13          LYNN MOORER: I see.

14          SCOTT MARQUESS: To lead towards a -- the  
15 next step would be pilot studies for different kinds  
16 of remediation systems for TCE and groundwater.

17          LYNN MOORER: One last question: Do you  
18 have any idea of a rough time line for reaching  
19 agreement with them so that we have some -- we can  
20 say, okay, an agreement is in place, and then we  
21 start looking for plans beyond that?

22          SCOTT MARQUESS: Well, the plan was for  
23 them to implement -- to have an agreement and  
24 implement the work in the plan that you've seen this  
25 summer, so I think we're on track to do that.

1                   LYNN MOORER:  Thank you.

2                   GARTH ANDERSON:  Okay.  If that's the last  
3   question we -- during the break we -- I was talking  
4   with Ms. Konecky about a date for the next RAB  
5   meeting, and apparently October 19th may not be an  
6   opportune date for the meeting, so I guess I'll do  
7   some additional coordination with folks.

8                   If there are some alternative dates to be  
9   proposed we're prepared to execute on that  
10  alternative date.

11                  So, Melissa, do you have a different date  
12  in mind?

13                  MELISSA KONECKY:  I don't.

14                  GARTH ANDERSON:  Do you want to just get  
15  back with me on that?

16                  MELISSA KONECKY:  Yeah, that'd be great.

17                  GARTH ANDERSON:  Okay.  It looks like a  
18  wrap, folks.  Thanks for coming out.  Hopefully the  
19  weather won't be too bad on your way home.

20                               (10:15 p.m. - Adjournment.)

21                               \*\* \*\* \*\* \*\*

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